VSB – TECHNICAL UNIVERSITY OF OSTRAVA

FACULTY OF ECONOMICS

DEPARTMENT OF FINANCE

Hodnocení rentability společnosti Kofola CeskoSlovensko a.s.

Profitability Assessment of Kofola CeskoSlovensko a.s.

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1. Introduction
2. Description of the Financial Analysis Methodology
3. Assessment of Financial Position
4. Profitability Assessment
5. Conclusion

Bibliography
List of Abbreviations
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The declaration

I hereby declare that I have elaborated the entire thesis including annexes myself.

Ostrava dated 1. 5. 2019

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Student's name and surname

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1. Introduction

Profitability ratio is one of the most important ratios of a company which includes return on assets, return on equity, net profit margin and operating profit margin. The stronger profitability ability of a company, the better strength of a company is.

Therefore this thesis will focus on the analyzing the Kofola company's profitability ability and also other financial ratios. The Kofola company is a very famous non-alcohol beverage company in Czech Republic. And in this thesis, we will use three ways of analysis to assess its financial condition. They are common-size analysis, financial ratio analysis and decomposition analysis.

The main goal of my thesis is to analyze the profitability ability of Kofola company. Through the analysis of profitability ratios, we can know the companies' bottom line and its return to investors and we can know the Kofola's ability to transform sales into profits and the ability of generating return for its shareholders.

First we will introduce some methods and financial terms which will be used in the following part. In chapter 2, we introduce what is balance sheet, income statement and cash flow statement and what is profitability ratios, liquidity ratios, solvency ratios and assets managements ratios and the way how to analyze financial statements and financial ratios.

Then in chapter 3, we will introduce some basic information about Kofola company, such as the history of Kofola company, the products and services of Kofola company and the structure of Kofola company. And after introducing the Kofola company, we will use common-size analysis and financial ratio analysis to assess the financial condition of Kofola company.

In chapter 4, we will use decomposition analysis to decompose one of the profitability ratios ROE. We spilt ROE into many component ratios and we make further decomposition. We decompose the component ratios into many specific financial items to find out which specific financial items has the biggest influence to the component ratio and find out which component ratio has the biggest impact on the basic ratio.

In chapter 5, we conclude what we find through the financial analysis and give our comments to the Kofola company's situation. In addition, we also point out where the problem

of Kofola company is and give some suggestions to the Kofola company.

2. Description of the Financial Analysis Methodology

In this chapter we will introduce the financial analysis methodology which will be used by us to analyze the Kofola company's financial position. This chapter will be divided into five parts and the first part is about the financial statements which are very important to the financial analysis. Because we must first know the details about the financial statements then we can make the financial analysis. And in the following four parts, common-size analysis, financial ratio analysis, Dupont analysis and influence quantification will be described in order.

Financial analysis is the process of selecting, evaluation and interpreting financial data. And its aim is to formulate the assessment of the company's present and future financial position, which is very important to a company's manager. Only when the company's manager knows clearly what the financial position of the company is, can they make a good and proper choice and decision. Therefore, in the light of the importance and significance of the financial analysis, we will describe these four financial analysis methods in detail.

2.1 Financial statements

Financial statements are formal records of the financial activities and position of a company. And there are three kinds of financial statements including balance sheet, income statement or profit/loss statement and cash flow statement. They can provide the useful information which is used by the companies' managers who want to make a wise decision. Therefore, to know and understand what information that the financial statements give us is very important to corporates' managers.

2.1.1 Balance sheet

The balance sheet summarizes the assets of a company, the value of these assets and the mix of financing used to finance these assets which includes equity and liabilities at a given point in time. Balance sheet consists of two main parts. One is the assets and we usually put

them on the left side of the balance sheet. The other one is the shareholders' equity and liabilities which are put on the right side of the balance sheet. The form of balance sheet is shown like the Tab 2.1

Tab. 2.1 An example of the balance sheet

Balance sheet	
Current assets	**Shareholders' equity**
Cash and cash equivalents	Preferred stock
Receivables	Common stock
Inventories	Retained earnings
Total current assets	Total shareholder's equity
Fixed assets	**Current liabilities**
Land	Account payables
Buildings and improvements	Commercial thesis
Less accumulated depreciation	Total current liabilities
Goodwill	**Fixed liabilities**
Total fixed assets	Long-term debt
	Deferred income taxes and others
	Total fixed liabilities
Total assets	**Total liabilities and shareholders' equity**

Source: Dluhosova (2014, p51)

The relationship between assets and liabilities and shareholders' equity is:

$$Assets = Liabilities + Shareholders' Equtiy. \quad (2.1)$$

From this formula we can know that the amount of total assets is always equal to the amount of total liabilities and shareholder's equity. As a consequence, we can use this formula to check whether the numbers on the balance sheet are right or not.

The assets of a company can be generated either by investing activities, operating activities or financing activities. And they are controlled by the shareholders and expected to generate benefits to the company. According to the holding time, assets can be classified as current assets

and fixed assets. Current assets can be also called short-term assets, which means the holding time of current assets is usually shorter than one year. And the liquidity of current assets is high which means that the current assets can be converted into cash very quickly. Common examples of current assets are accounts receivables, inventories and cash and cash equivalents. As for fixed assets, they also have another name called long-term assets, meaning that the holding time of fixed assets is longer than one year. But the fixed assets have lower liquidity compared to the current assets. The main fixed assets are tangible assets such as equipment, land and buildings, intangibles assets such as trademark, patents and goodwill and financial investments such as shares and bonds.

The shareholders' equity is the capital belonging to the owners or the shareholders of the company. And it can be classified as common and preferred shares, share premium and retained earnings. Shareholder's equity is the difference between total assets and total liabilities. It shows how the company has been financed with the help of common shares and preferred shares.

The liabilities or debts are the company's capital which are provided by the creditors. And there are three main creditors, they are banks, other companies and individuals. Banks can lend money to companies, other companies can through money market and buy the instruments of money market such as commercial thesis of other companies and individuals can buy the bonds which are issued by companies to become the creditors.

Because the money comes from borrowing, you must repay the amount of money plus some interest to the creditors. If the money must be paid back within 12 months, we call it current liabilities. Accounts payable, accrued expenses and short-term notes all are the current liabilities. Capitals come from money market usually are current liabilities. And the long-term liabilities are the liabilities which can be pay back more than one year, it also can be called as fixed liabilities. Bank loans and the capital from issued bonds are usually long-term debts.

2.1.2 Income statement

The income statement is a very important financial statement used for reporting a company's financial performance during a specific period. The income statement is also known as the profit and loss statement, the income statement primarily focused on company's revenues

and expenses. The company gains profits if the amount of revenue is higher than the amount of expenses and vice versa. And the income statement is also very important for our financial analysis. We can see an example of income statement as shown like the Tab 2.2.

Tab. 2.2 An example of the income statement.

Income statement
Revenues
Cost of sales
Operating, selling and marketing expenses
Administrative expenses
Operating income
Minority interest
Interest income
EBIT
EBT
Taxation
EAT

Source: Dluhosova (2014, p54)

In the income statement, the basic equation is computed as

$$Net\ income = Revenue - cost. \tag{2.2}$$

Net revenue is earned from daily sale and service and the costs must be spent in the ordinary activities of the company such as sales expenses. There are two activities in income statement. They are operating activity and financial activity. So when we calculate the revenues and the costs of the company, we need to know which activity they belong to.

Operating activities are the daily activities of a company involved in producing and selling its product, generating revenues, as well as general administrative and maintenance activities. Operating activities will generally provide the major company's cash flow and largely determine whether it is profitable. Some common operating activities include cash receipts from goods sold, payments to employees, taxes, and payments to suppliers. Operating revenue includes revenues from sale of products, goods and services. Operating expenses includes costs

associated with generating operating revenues such as raw material consumption, depreciations and salaries paid to employees. The results of operating activities in income statement is EBIT, that means operating profit before interest and taxes.

Financial activities are the activities happened in the financial market. Financial revenues include interest received, dividends received, coupons received, etc. Financial costs and expenses include coupons paid and interests paid. And the sum of operating and financing income is the EBT, which means the earing before the taxation. After taxation, we can get the EAT, meaning the earning after taxation which is also known as net income.

2.1.3 Cash flow statement

Cash flow statement can provide the information about the cash inflows and cash outflows during a particular period. Cash inflows means the money flow into the company. Cash outflows means that the money flow out from the company. And it can also explain the differences between beginning and ending balance of cash of a company. Cash inflows and outflows are summarized in three categories, they are operating activities, investing activities and financing activities. We can see an example of cash flow statement as Tab 2.3 shown.

Tab. 2.3 An example of the Cash flow statement

Cash flow from operating activities
Income from continuing operations
Depreciation and amortization
Deferred income taxes
Decrease(increase) in accounts receivable
Increase in inventories
Increase in accrued liabilities
Cash flow from investing activities
Payments for property and equipment
Investment in international operations
Proceeds from the disposal of fixed assets
Other investing activities
Cash flow from financing activities
Dividends paid
Income tax paid
Interest paid

Source: Dluhosova (2014, p57*)*

It is important that we know that the cash flow statement and the income statement are different. Since the income statement is calculated on an accrual basis and the cash flow statement is calculated on the cash flow statement, the profits of the two statements are different. For example, if we spend some money to buy the raw materials needed for production, and we don't currently pay the money, we will charge it as a business activity in the income statement, not the cash flow statement. When we prepare the cash flow statement, we always divide the cash flow into three parts. They are operating activities, investing activities and financial activities.

The cash flow generated by business activities refers to the daily activities of the company, such as the sales of goods and the production process. This section measures the cash flow that a company receives from production or service over a period of time. The cash flow generated

by investment activities can show people the company's capital inflows and outflows, that is, sales and purchases of investments. Investments include tangible assets, intangible assets, and long-term investments in stocks and bonds. Cash flow from financial activities can reflect changes in liabilities, loans, and dividends.

2.2 Common-size analysis

Common-size analysis is an analysis of financial statement data. People who use a common-size analysis want to determine trends and major differences in data and financial statements over a specific time period. When using common-size analysis, we have a lot of data comparison options. For example, we can compare data from one company at different times or data from different companies at the same time. And there are two types of common-size analysis. They are horizontal common-analysis and vertical common-analysis. We will introduce them in detail in the following parts.

2.2.1 Horizontal common-size analysis

Horizontal common-size analysis is an analysis of the evolution of data from financial statements over time or by calculating their changes relative to a given period of time. If the statement has two or more periods, a horizontal common-size analysis is used. We always select the first period of the statement as the reference period, and then we can use the data of the following period to compare with the data of the reference period. We will regard the data of base year as 1 and use other years' number to be divided by the base year's number.

Calculation of changes is based on this formula:

$$Index\ change = \frac{U_t}{U_1}. \tag{2.3}$$

Where U_1 is the data of base year and U_t is the data of other years.

2.2.2 Vertical common-size analysis

The vertical common size analysis is an analysis that calculates the change in the proportion of the selected baseline at a certain point in time. It can display each item on the

statement as a percentage of the underlying graphic within the statement. We will use this analysis method in Kofola's balance sheet and income statement in the next chapter.

In the balance sheet, total assets, total equity and total liabilities can be used as benchmarks. Individual asset projects, liability projects, and equity projects are shown as a percentage of the baseline. In the income statement, income and expenses can be used as a benchmark. Individual income items and individual expense items are shown as a percentage of the selected baseline. When we calculate the percentage, we use the following formula:

$$E\% = \frac{X_i}{\sum_n X_i} \cdot 100, \tag{2.4}$$

where $E\%$ is the proportion of the project, X_i is the item, $\sum_n X_i$ is the sum of item.

2.3 Financial ratio analysis

Financial ratio analysis is a comparative analysis of financial data in the form of financial ratios. The purpose of financial ratio analysis is to evaluate the financial health of the company. The basic data for financial ratio analysis is financial data and market data.

Financial ratio analysis is the most common method of analyzing a company's financial situation. By using these financial ratios, creditors, investors, and company managers can understand the company's financial situation. When we want to compare different companies, we can compare the same financial ratios of different companies in the same period. Financial ratios are useful and important indicators of financial analysis

In this thesis, we describe four types of financial ratios, which are profitability ratios, current ratios, solvency ratios and asset management ratios. Each ratio has its own calculation formula, which represents different meanings and is used in different situations. In the next five sections, we will discuss them one by one.

2.3.1 Profitability ratios

We use profit ratios to analyze the company's ability to generate profits from invested capital. For almost all profit ratios, the higher their value, the greater the company's profits. If a company has a high profit ratio, we can write that this company has a better competitive

position than other companies. So if we use them, we can see that the company's ability to make a profit

There are lots of profitability ratios, here we will introduce the four basic ratio, they are: net profit margin, operating profit margin, return on assets and return on equity.

Net profit margin (NPM) can be calculated as a percentage of revenue per unit of income. The net profit margin can show how much money the company has earned into profit. It can be defined as:

$$NPM = \frac{EAT}{Rev}, \tag{2.5}$$

where EAT means earning after taxes and Rev is the abbreviation of revenue.

The data for this formula comes from the income statement, and sometimes we can use net income instead of after-tax income. Companies have four ways to improve their net profit margins. The first is to increase the sales of products, the second is to increase the price of products or services, the third is to reduce the cost of operating costs, and the last is to reduce operating costs.

The next ratio is the operating profit margin, It shows the ability of the company to generate revenue and control operating costs and it also shows the ability of the company to manage operations and it gives the owners of the company a lot of important information about the profitability of the company. The formula of profit margin is:

$$OPM = \frac{EBIT}{Rev}, \tag{2.6}$$

where EBIT is earning before interest and taxes, REV is the abbreviation of revenue, OP is the abbreviation of operating.

The income of this formula comes from the income statement, and the number of returns cannot be negative, and it can be positive or zero. When a company's income is zero, it means that the company did not have income at the time. The factors affecting the operating profit rate are: the average price of a product, the cost of a product, the sales volume, the control ability of management fees, and the control ability of sales expenses.

The third ratio which will be introduced is return on assets (ROA). It can measure the after-tax income or EBIT from the percentage of assets per unit of company. This ratio can help people understand how much profit a company can earn by using their assets.

Calculation of return on assets (ROA) is based on this formula:

$$ROA = \frac{EAT}{A}, or \tag{2.7}$$

$$ROA = \frac{EBIT}{A}, \tag{2.8}$$

where EAT means earning after taxes, A means assets. EBIT means earning before interest and taxes.

The return on net assets of listed companies will change greatly in different periods, and how it changes depends on the industry. If the number of ROAs is high, this is very good for the company, which means that the company gets a lot of revenue by using less investment.

The last ratio is return on equity (ROE). This ratio measures the efficiency of a company's profit from each unit of shareholders' equity.

ROE is expressed as a percentage and calculate as:

$$ROE = \frac{EAT}{Equity}, \tag{2.9}$$

where EAT is earning after taxes, we also can use net income. Net income is before dividends paid to common shareholders but after dividends paid to preferred shareholders. When we use this approach, we should note that preferred stocks are not shareholders' equity. In general, the higher the return on net assets, the better for the company. For a company, the ideal return on equity is higher than 15%. If the return on net assets is higher than 20%, it is a very good level.

What is said above are the main basic ratios of profitability ratios. In the next chapter, we will use them to analyze the Kofola company's profitability.

2.3.2 Liquidity ratios

The liquidity ratio can only be positive. They can be used to analyze a company's current assets, current liabilities and liabilities. Current assets are in the form of cash or assets that can be converted into cash in a short period of time. Current assets are assets with a maturity of less than one year.

The company's liquidity can show us the company's ability to own cash when it should repay short-term debt. If a company has a high liquidity ratio, this means that the company has more possibilities to repay short-term debts. The company's default risk is small, so companies

with high liquidity ratios are safer for creditors and investors.

There are three main liquidity ratios, they are current ratio, quick ratio and cash ratio. Quick ratio is more accurate than current ratio.

Current ratio measures the amount of liquid assets per unit of current liabilities. Sometimes we also call it the working capital ratio. It is mainly used to explain the company's ability to repay debt with assets. The formula of current ratio is:

$$Current\ ratio = \frac{Current\ assets}{Current\ liabilities}. \tag{2.10}$$

As we have previously written in the financial statements, current assets and current liabilities are assets and liabilities with maturities of less than one year. Current assets typically include cash, marketable securities, inventory, and accounts receivable. Current liabilities usually include debt, accounts payable, etc.

The next liquidity ratio is quick ratio. The quick ratio is more stringent than the current ratio to check the liquidity of the company because the liquid assets are adjusted for inventory, they are due to the fact that they are less liquid. Quick ratio can be defined as:

$$\text{Quick ratio} = \frac{Cash + account\ receivables}{Current\ liabilities}, \tag{2.11}$$

$$\text{Quick ratio} = \frac{Current\ assets - inventories}{Current\ liabilities}. \tag{2.12}$$

The quick ratio measures the dollar amount of liquid assets available to the company against the dollar amount of its current liabilities. Liquid assets are the assets that can be quickly converted into cash with minimal impact to the price received in the open market, while current liabilities are a company's debts or obligations that are due to be paid to creditors within one year. s. And the important factor which can affect the reliability of quick ratio is the ability to translate receivable into cash.

The last ratio is the cash ratio, which is a more conservative assessment of the company's ability to repay debt than many other current ratios. Here we use the assets which are in the form of cash. Cash ratio is calculated as:

$$Cash\ ratio = \frac{Cash + Marketable\ securities}{Current\ liabilities}. \tag{2.13}$$

Securities can be sold on the market immediately within hours or days. This formula reflects the company's ability to repay debt without the accounts receivable and the sale of

inventories.

2.3.3 Solvency ratios

The solvency ratio measures the company's ability to repay long-term liabilities. Sometimes we call it financial leverage because they measure the way of financing. The solvency ratio shows us whether companies can use their cash flow to repay short-term liabilities and long-term liabilities. These ratios are very important for investors and creditors because they give them a lot of useful information about the company's default risk. If this ratio is low, it means that the company has a large potential for debt default.

There are three types of solvency ratio: debt ratio, debt to equity ratio and interest coverage. We will introduce them in detail in the following parts.

The debt ratio is a special solvency ratio. It shows the proportion of liabilities in company assets. The higher the ratio of a company, the higher the leverage of the company and the higher the financial risk of the company. Debt ratio is calculated by this formula:

$$Debt\ ratio = \frac{Total\ liabilities}{Total\ assets}. \tag{2.14}$$

The higher the debt ratio, the more leveraged a company is, implying greater financial risk. At the same time, leverage is an important tool that companies use to grow, and many businesses find sustainable uses for debt. There are many factors that affect the debt ratio, such as changes in profits, net cash flows, assets and liabilities. If a company's debt ratio is high, it means that the company has more money to use, but they should pay more interest on the debt. If a company's debt ratio is low, it means that the company's interest expenses are lower and the risks are lower, but they may not have enough money to run the business. For different people, the ideal debt ratio is different in their own position.

Next ratio is debt to equity ratio. This ratio is very similar to the debt ratio, which describes the amount of a company's liabilities relative to the company's equity. This ratio can be used in the same personal financial statements as the company's financial statements, so we also call it the individual debt-equity ratio. The formula of it can be represented in the following way:

$$Debt\ to\ equity = \frac{Total\ liabilities}{Total\ equity}. \tag{2.15}$$

If a company's ratio is higher than 1, it means that the company uses more debt than equity for asset financing. If the ratio is equal to 1, this means that the equity is equal to the debt, which is half of the total assets.

Interest coverage also called times interest earned. It tells people that expanding the company's operating profit is enough to pay for their current interest payments. In general, a company's interest coverage greater than 1 means that the company has the ability to repay interest. Conversely, if the interest rate of a company is less than one, it means that the company has no ability to repay interest. The formula of interest coverage is:

$$Interest\ coverage = \frac{EBIT}{interest\ paid}. \tag{2.16}$$

The higher the company's interest coverage, the more debt costs the company has. So company's managers should pay attention to this ratio. When the ratio is high, they must do to lower the ratio. Generally speaking, if the ratio is higher than 2.5, it is a warning signal for the company.

2.3.4 Assets management ratios

Assets management ratios can measure how well the company uses its assets. It is also known as activity ratios. it shows people how much the company invested in a specific asset relative to the revenues which are collected by the assets.

There are eight basic ratios of assets management ratios: average collection period (ACP), accounts receivable turnover (ART), accounts payable turnover (APT), inventory turnover (IT), total assets turnover (TAT), days of inventory on hand, days of sales outstanding, number of days of payables.

Asset management ratios are the key to analyzing how effectively and efficiency your small business is managing its assets to produce sales.

Average collection period (ACP) can measures the number of days it takes a company to collect its credit accounts from its customers. A lower number of days is better because this means that the company gets its money more quickly. Average collection period varies from industry to industry, however. It is important that a company compare its average collection period to other firms in its industry. The formula of it can be represented in the following way:

$$ACP = \frac{Account\ receivable}{Revenue} \cdot 360. \tag{2.17}$$

Account receivable turnover (ART) is a ratio that works hand in hand with an average collection period to give the business owner a complete picture of the state of the accounts receivable. Receivables turnover looks at how fast we collect on our sales or, on average, how many times each year we clean up or totally collect our accounts receivable. The calculation is as follows:

$$ART = \frac{Revenue}{Average\ account\ receivable}. \tag{2.18}$$

Generally, the higher the receivables turnover, the better as it means you are collecting your credit accounts on a timely basis. If your receivables turnover is low, you need to take a look at your credit and collections policy and be sure they are on target.

Account payable turnover (APT) is a short-term liquidity measure used to quantify the rate at which a company pays off its suppliers. Accounts payable turnover shows how many times a company pays off its accounts payable during a period. The calculation is as follows:

$$APT = \frac{Purchase}{Average\ account\ payable}. \tag{2.19}$$

Inventory turnover (IT) is a ratio showing how many times a company has sold and replaced inventory during a given period. A company can then divide the days in the period by the inventory turnover formula to calculate the days it takes to sell the inventory on hand. Calculating inventory turnover can help businesses make better decisions on pricing, manufacturing, marketing and purchasing new inventory. The calculation is as follows:

$$IT = \frac{Costs\ of\ good\ sold}{Average\ inventory}. \tag{2.20}$$

Inventory turnover measures how fast a company sells inventory and how analysts compare it to industry averages. Low turnover implies weak sales and possibly excess inventory, also known as overstocking. It may indicate a problem with the goods being offered for sale or be a result of too little marketing.

Total assets turnover (TAT) measures the value of a company's sales or revenues relative to the value of its assets. The asset turnover ratio can be used as an indicator of the efficiency with which a company is using its assets to generate revenue.

The higher the asset turnover ratio, the more efficient a company. Conversely, if a company

has a low asset turnover ratio, it indicates it is not efficiently using its assets to generate sales. The calculation is as follows:

$$\text{TAT} = \frac{Revenue}{Total\ assets}. \tag{2.21}$$

There is an example to explain this formula: if total assets turnover of a company is 2, that means the company can get 2 euros of revenues per one euro of assets.

Days of inventory on hand is an indicator of the average consumption rate of a company's inventory. This indicator can also be called the day's sales inventory. Investors and financial analysts use inventory days as a tool to assess the efficiency of a company's management of inventory funds. Because this is a comprehensive measure, it is of the least useful to managers. They may track the number of days it takes to sell or use a particular product, not the total number of days. The calculation is as follows:

$$Days\ of\ inventory\ on\ hand = \frac{Number\ of\ days\ in\ period}{Inventory\ turnover}. \tag{2.22}$$

For investors and other stakeholders, the fewer days of inventory on hand, the better. For an enterprise, it is important to maintain adequate inventory levels. Constantly running out of the items you sell will affect sales and will ruin your reputation. If you run a manufacturing company, a shortage of stock can lead to production disruptions. However, holding too much inventory can be costly. The cost of storing goods or raw materials. Unsold items may be out of date. If the goods are perishable, too much can cause deterioration. All of these problems have led to a decline in corporate profits.

Days of sales outstanding is a measure of the average number of days that it takes a company to collect payment after a sale has been made. The calculation is as follows:

$$Days\ of\ sales\ outstanding = \frac{Number\ of\ days\ in\ period}{Receivable\ turnover}. \tag{2.23}$$

Due to the high importance of cash in business operations, the company's best interest is to recover its outstanding receivables as soon as possible. Because of the time value principle of money, companies can generally expect that they will receive unpaid receivables, but the company spends time waiting for the money received to be lost. By quickly turning sales into cash, companies have the opportunity to use cash again faster.

Number of days of payables is an indicator of how fast or slow the company is pays its

creditors and the ratio is compared with other companies in the industry to measure the performance of this company. The calculation is as follows:

$$Number\ of\ days\ of\ payables = \frac{Number\ of\ days\ in\ period}{Payables\ turnover}. \qquad (2.24)$$

A low payables turnover ratio (or high days payables) is in favor of the company. However, it could also mean that the company is finding it difficult to make payments.

If a company's payable turnover rate is high, the company's payment policy is very loose, and it is likely that it does not use credit facilities. This may also mean that the company is using the discount offered by the supplier to pay in advance.

2.4 DuPont analysis

DuPont analysis is created by the DuPont Corporation in the 1920s. We can make the pyramidal decomposition of return on equity by using this method. For calculation, we use the assets' gross book value rather than the assets' net book value in order to produce a higher return on equity (ROE) for the company. The formula of ROE can be represented in the following way:

$$ROE = \frac{Net\ profit}{Equity} = \left(\frac{Net\ income}{Revenue}\right) \cdot \left(\frac{Revenue}{Total\ assets}\right) \cdot \left(\frac{Total\ assets}{Equity}\right), \qquad (2.25)$$

where $\left(\frac{Net\ income}{Revenue}\right)$ is net profit margin, $\left(\frac{Revenue}{Total\ assets}\right)$ is assets turnover and $\left(\frac{Total\ assets}{Equity}\right)$ is financial leverage. And if we split $\left(\frac{Net\ income}{Revenue}\right)$, it can be shown like this:

$$\frac{Net\ income}{Revenue} = \left(\frac{Net\ income}{EBT}\right) \cdot \left(\frac{EBT}{EBIT}\right) \cdot \left(\frac{EBIT}{Revenue}\right), \qquad (2.26)$$

where $\left(\frac{Net\ income}{EBT}\right)$ is tax burden, $\left(\frac{EBT}{EBIT}\right)$ is interest burden and $\left(\frac{EBIT}{Revenue}\right)$ is EBIT margin. Therefore, ROE can be shown as:

$$ROE = \left(\frac{Net\ income}{EBT}\right) \cdot \left(\frac{EBT}{EBIT}\right) \cdot \left(\frac{EBIT}{Revenue}\right) \cdot \left(\frac{Revenue}{Total\ assets}\right) \cdot \left(\frac{Total\ assets}{Equity}\right), \qquad (2.27)$$

We decompose return on equity into five parts. They are assets turnover, financial leverage, tax burden, interest burden and EBIT margin. They are the main factors which can affect the return on equity of a company. The influence of every factors is changeable, and can be both negative or positive in the different situation.

We can even decompose the ratio furthermore.

$$\frac{EBIT}{Rev} = \frac{1-(TC-TI)}{Rev} = 1-\left(\frac{TC}{Rev}-\frac{TI}{Rev}\right), \tag{2.28}$$

$$\frac{Rev}{Total\ assets} = \frac{360}{\frac{A}{Rev}} \cdot 360, \tag{2.29}$$

$$\frac{A}{E} = 1+\frac{Liabilities}{E}. \tag{2.30}$$

After further decomposition, we can know what sub-factors influence the basic ratio most and we can give precise suggestion to the companies for change.

2.5 Influence quantification

There are four methods of Influence quantification, they are methods of gradual changes, logarithmic decomposition method, functional decomposition method and integral decomposition method.

2.5.1 Method of gradual changes

This method can quantify the changes of the basic ratio by the changes of the component ratio. In the case of decomposition with three component ratios:

$$\Delta X a_1 = \Delta a_1 \cdot a_{2,0} \cdot a_{3,0}, \tag{2.31}$$

$$\Delta X a_2 = a_{1,1} \cdot \Delta a_2 \cdot a_{3,0}, \tag{2.32}$$

$$\Delta X a_3 = a_{1,1} \cdot a_{2,1} \cdot \Delta a_3, \tag{2.33}$$

where X is the basic ratio, ΔX is the absolute change in the basic ratio, a is component ratio, Δa is absolute change in the component ratio, $\Delta X a_1$ is the absolute change of the basic ratio caused by the change of the first a_1 component ratio.

2.5.2 Logarithmic decomposition method

The advantage of logarithmic decomposition method is we just need one formula for the calculation of the impact quantification no matter how many component ratios we have. So this method is more convenience than the first one. The calculation is as follows:

$$\Delta Xa_i = \frac{lnIa_i}{lnI_x} \cdot \Delta X, \tag{2.34}$$

where X is the basic ratio, ΔX is the absolute change in the basic ratio, $I_x = \frac{x_1}{x_0}$ is the e index of change in the basic ratio, $I_a = \frac{a_1}{a_0}$ is the index of change in component ratio. This formula is very simple and convenient to use but we should notice that if the numbers are negative, we can not use this formula.

2.5.3 Functional decomposition method

Functional decomposition method works with relative changes of basic and component ratios. If there are three component ratios, the formula is:

$$\Delta Xa_1 = \frac{1}{R_x} \cdot \left(1 + \frac{1}{2} \cdot Ra_2 + \frac{1}{2} \cdot Ra_3 + \frac{1}{3} Ra_2 \cdot Ra_3\right) \cdot \Delta X, \tag{2.35}$$

$$\Delta Xa_2 = \frac{1}{R_x} \cdot \left(1 + \frac{1}{2} \cdot Ra_1 + \frac{1}{2} \cdot Ra_3 + \frac{1}{3} Ra_1 \cdot Ra_3\right) \cdot \Delta X, \tag{2.36}$$

$$\Delta Xa_3 = \frac{1}{R_x} \cdot \left(1 + \frac{1}{2} \cdot Ra_1 + \frac{1}{2} \cdot Ra_2 + \frac{1}{3} Ra_1 \cdot Ra_2\right) \cdot \Delta X, \tag{2.37}$$

where X is the basic ratio, ΔX is the absolute change in the basic ratio.

$$\mathrm{R_x} = \frac{\mathrm{x_1} - \mathrm{x_0}}{\mathrm{x_0}}, \tag{2.38}$$

$$Ra_i = \frac{a_1 - a_0}{a_0}. \tag{2.39}$$

When we use influence quantification, we have four steps, the first one is to calculate the basic ratio values for each period and the absolute change value. The second step is decomposition of the basic ratio into n component ratios and then check that whether the decomposing is correct or not. Next one is the calculation of the component ratio values for each period. The last step is quantification of the impact of the change in component ratio on basic ratio.

2.5.4 Integral decomposition method

The procedure of integral decomposition method is similar as in the case of functional method. And the calculation is as follows:

$$\Delta Xa_j = \frac{Ra_j}{Rx^*} \cdot \Delta X, \tag{2.40}$$

where Rx^* means the sum of relative change of component ratios, ΔX means the absolute change of basic ratio and Ra_j means the relative change of single component ratio.

2.5.5 Influence quantification method for additive relation

In the chapter 4 we will decompose the ratio return on equity (ROE) further and how I calculate the influence of each specific item of the ratios. So here I will explain the process of the further decomposition and the calculation of influence.

First we will decompose ROE into five ratios, they are EAT/EBT, EBT/EBIT, EBIT/Rev, Rev/A and A/E. This process has been explained above. We will use the method of gradual change to calculate the effect of component ratios. First we calculate all the results component ratios then we calculate the absolute change of each year. Finally we use the results of component ratios to multiple the number of absolute change. We can get the effect of the component ratios. And then we will decompose three of them in further, they are EBIT/Rev, Rev/A and A/E.

We start with the decomposition of EBIT/Rev. Because EBIT equals to total cost (TC) minus total income (TI). It can be transformed as (TC-TI)/Rev. Furthermore, it can be transformed as TC/Rev minus TI/Rev. And TC equals all the item from the income statement which cause loss to the company and TI can be divided into all the items which increase company's income.

And as for Rev/A and A/E, we can use the same principle to transform them as 360/A/Rev·360 and 1+liabilities/E. And assets can be divided into current assets and long-term assets and liabilities can be divided into current debts and long-term debts.

And as for the calculation of influence. We will take TC/Rev as an example to explain the process because the principle of calculation is the same. First we need to calculate the TC/Rev of last year and this year. And we use the result of this year minus the result of last year. We can get an absolute change of TC/Rev. And we use this number of change to multiply the absolute change of (TC-TI)/Rev and divided by the change of influence of basic ratio EBIT/Rev. We can get the change of influence of TC/Rev.

3. Assessment of Financial Position

In the chapter, we will introduce some basic information about Kofola company, such as the history of Kofola company, the structure of Kofola company and the competition of Kofola company. Then we will do the horizontal analysis and vertical analysis to the Kofola company.

3.1 Basic description of the company

Kofola ČeskoSlovensko is a company which produce non-alcoholic drinks in seven production plants serving eight markets across central and eastern Europe with 26 years history. There are 2198 employees in Kofola company and it has taken over company LEROS， which is a traditional Czech producer of products from medicinal plants and natural teas. And the recent goal of Kofola company is to be the CzechoSlovak leader in gastro and impulse, stabilize retail and offer the beverages in healthier form.

3.1.1 History of Kofola company

Kofola company is born in 1993 established by a Greek native family Kostas Samaras. But at that time the company's name is not Kofola yet. In 1996, the subsidiary transport company SANTA - NÁPOJE KRNOV was established. This year is also considered to be the year in which the Kofola company, as it is known today, officially came into being. And in 1998, the Kofola company enter into the Slovak market thanks to the improvement of technology. In 2000, the company united its production program with the Kofola drink for the first time. In 2002, the company purchases the trademark and the original recipe from the company Lvax for CZK 215 million.

During 2003-2009, the Kofola company makes many achievements, like developing new products and expanding broader fields. In 2007, Kofola was awarded the 8th place among the top 100 chart of the Most Admired Czech Companies. In 2012, The company Kofola Holding Inc. was renamed to Kofola ČeskoSlovensko Inc. Kofola was awarded the 5th place in the Czech TOP 100 most admired companies. In 2015, Kofola listed on the Prague Stock Exchange,

its employees becoming shareholders of the Group.

3.1.2 Structure of Kofola company

There are three main departments in Kofola company, which undertake different responsibilities. They are Board of Directors, Supervisory Board and Audit Committee. The Board of Directors is responsible for the day-to-day management of Kofola operations under the Supervisory Board. And the Board of directors has the duty to keep the Supervisory Board informed, to consult with Supervisory Board when they meet important matters and to submit certain important decisions to the Supervisory Board for its approval. The members of Board of Directors are elected by the Supervisory Board. A member of the Board of Directors is appointed for a period of five years and may be reappointed. The Supervisory Board may also dismiss any member of the Board of Directors at any time.

The Supervisory Board is responsible for supervising the conduct of and providing advice to the Board of Directors and for supervising the business generally. The members of the Supervisory Board are elected by the General Meeting. The Supervisory Board consists of six members. The Supervisory Board appoints a chairperson from amongst its members. The General Meeting may at any time suspend or dismiss Supervisory Board members.

The Audit Committee assists the Supervisory Board in supervising the activities of the Board of Directors, with respect to selection of an auditor, monitoring the audit, presents to Board of Directors its findings and recommendations relating to the audit, performs other tasks determined by the Board of Directors, submits the annual reports on its operations to the Board of Directors and other. The members of the Audit Committee are elected by the General Meeting from among members of the Supervisory Board or third parties.

3.2 Common-size analysis of Kofola company

Common-size analysis can help us to know the trends and changes of company's financial data and development. So in this chapter we will use horizontal and vertical analysis to evaluate the changes and trends of financial information in Kofola company during 2014-2018. And the data we use is calculated according to the financial statements which will be listed in Annex.

3.2.1 Horizontal common-size analysis

The aim of horizontal common-size analysis is to show us the change of financial items in the company and we also should to find the reason behind these changes. Generally the way of doing horizontal common-size analysis is calculating the absolute change. But this time we choose to change another way, to calculate the index change to evaluate the financial items. The principle is that we select the first year as the base year and regard the base year's data as denominator and use other year's date as the nominator.

Firstly I will show you the the index change in Tab 3.1

Tab 3.1 Index change of the financial item of Kofola company

	2014	2015	2016	2017	2018
Current assets	1	1.899	1.736	1.003	1.238
Non-current assets	1	1.221	1.178	1.147	1.042
Total assets	1	1.425	1.346	1.104	1.101
Current liabilities	1	1.644	1.572	1.168	1.051
Non-current liabilities	1	1.700	1.535	1.802	2.492
Total liabilities	1	1.661	1.561	1.361	1.490
Shareholder's equity	1	1.114	1.063	0.766	0.591

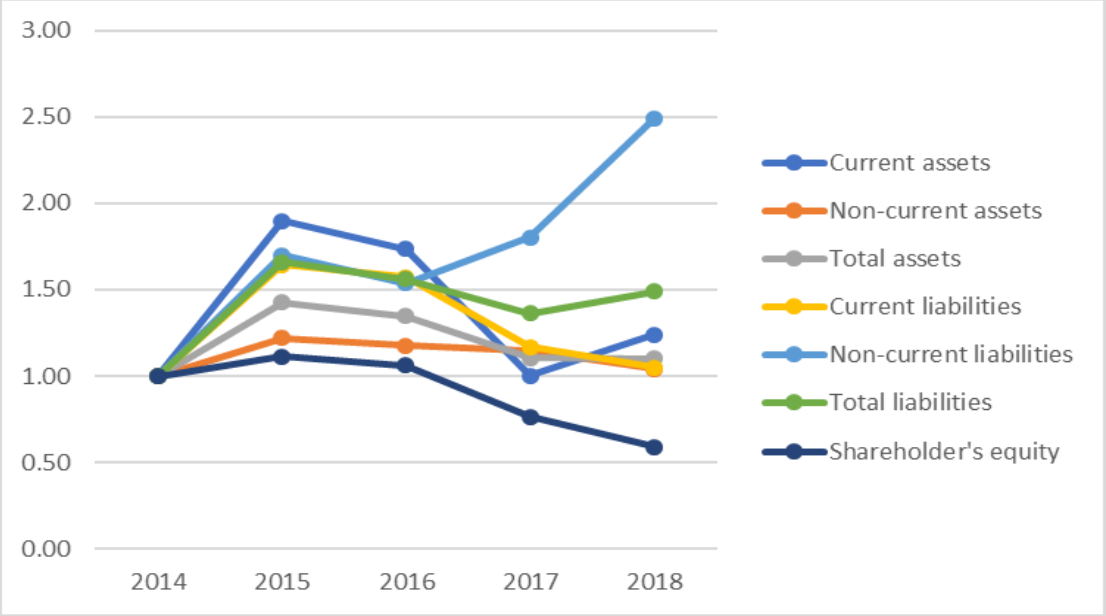
From Tab 3.1 we can see that the business condition of Kofola company is not very good from the overall perspective. Because the shareholder's equity which represents the strength of a company is decreasing year after year. I think the CPI of non-alcoholic beverage could be one of the reason that cause the decline. I find that during 2014-2016, the CPI of non-alcoholic beverages in Czech Republic are negative in most time. So it indicates that the price of the non-alcoholic beverages is very low and the company can not make much profit. So the non-alcoholic beverages industry's recession can be one of the reason that cause the decline of company' benefit.

We can also observe that during 2015-2016, there are huge increases in current assets and mainly in the item cash and cash equivalents. As is known to us all that current assets can not bring profit or generate profit to the companies. So I think Kofola company keeps too much

cash on hand which is not efficient and good for company's benefit. As for liabilities, we can see that the current liabilities' change is similar to the current assets. Both of them are increasing during 2015-2016 and decreasing during 2017-2018. So I demonstrate that the purpose that the Kofola company keeps much cash on hand is prepared to pay back the current liabilities.

The trend of non-current liabilities is increasing during 2014-2018 from an overall perspective. And the long-term debt is mainly used in the plant and equipment.

Figure 3.1 Horizontal common-size analysis of the balance sheet



This is a comprehensive figure of horizontal analysis that shows the change and trends of different financial items from 2014 to 2018. We can clearly see the trends and volatility of each financial item. We can see that Non-current assets and shareholder's equity have an exact opposite trend. The non-current assets' trend is increasing and the shareholder's equity's trend is decreasing during 2014-2018. And the increasing speed of non-current assets is much higher. As for current assets and current liabilities, they have the nearly same trends during 2014-2018. Both of them are increasing from 2014 to 2015 and decreasing from 2015 to 2017. And the non-current assets are very stable and constant these years. Only very slight increase in non-current assets.

Then I will use the same way to analyze the index change in income statement from 2014 to 2018 of Kofola company. And I will show you the index change of income statement in Tab 3.4.

Tab 3.4 Index change of items compared to 2014 in income statement

	2014	2015	2016	2017	2018
Revenue	1	1.140	1.115	1.110	1.134
Cost	1	1.116	1.085	1.065	1.045
Gross profit	1	1.181	1.165	1.182	1.279
Selling expenses	1	1.181	1.189	1.303	1.367
Administrative expense	1	1.405	1.400	1.245	1.475
Other expenses	1	4.473	1.392	1.537	2.088
Other operating income	1	9.057	5.687	8.585	4.906
Operating profit	1	0.982	0.596	0.659	0.085
Financial income	1	2.658	1.564	9.094	1.454
Financial costs	1	1.394	1.125	1.162	1.236
EBT	1	0.872	0.461	0.722	-0.117
Income tax	1	1.176	1.097	1.447	0.629
Net profit	1	0.789	0.287	0.525	-0.321

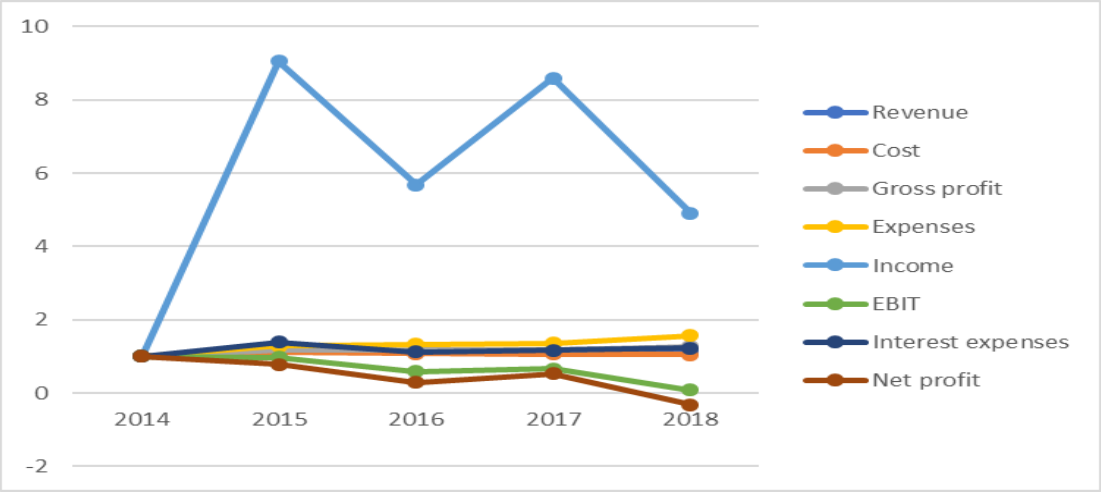
We can see from this table that Kofola company's economic situation is not very good because the net profit of Kofola company is decreasing year after year. In 2018, it even loses much money which is very dangerous for a company. However we can see that the gross profit is increasing year after year but the operating profit has the opposite result. So we can know that it is the high operating expenses that cause the decreasing of net profit. As a non-alcoholic beverage company, the operating profit is very important. If we observe in detail, we can see that the selling expenses, administrative expense and other expense are all increasing these years especially the selling expenses.

In this table we choose the data in 2014 as the base number. And if the value of selected year is lower than 1, it means that the selected year's value is lower than the base year's value and vice versa. If the value is negative, it means that the company begin to lose value. We can find the same result from this table compared to Tab 3.3. The gross profit is increasing steadily but the operating profit and net profit are decreasing year after year. Although the other operating income seems to be very high compared to 2014 but this does not matter much

because the base year's number is very small.

Then I will show you the figure about the index change of financial items in income statement.

Figure 3.2 Horizontal common-size analysis of the income statement



From this figure we can see that the index change and volatility of income is very huge. But actually the value of income is not that big. And we can also notice that the index of revenue and cost compared to 2014 do not have much change. They are almost horizontal and do not have much volatility. Therefore the index of gross profit do not have much change as well. But as for the earning before interest and tax and net profit, the trend of them are decreasing theses years and the value of net profit is even negative, which means that the company is experiencing a very difficult period. We can find the reason from this figure why the EBIT and net profit decrease year after year. Thanks to the relative constant gross profit and increasing expenses, the company starts to lose. We can see that the expenses increase from 2014 to 2018. Although it seems that the change is very low, the actual value of expenses are very high in deed.

3.2.2 Vertical common-size analysis of Kofola company

Vertical common-size analysis is an analytical method that can be used in the analysis of financial data. In a financial statement, the data in each item in the table is compared with the total number to determine the position, importance, and change of the item. Through vertical common-size analysis, you can understand whether the company's business has progress and the speed of development of the company. In this chapter we will use this way to analyze the

balance sheet and income statement about their structure of composition from 2014 to 2018.

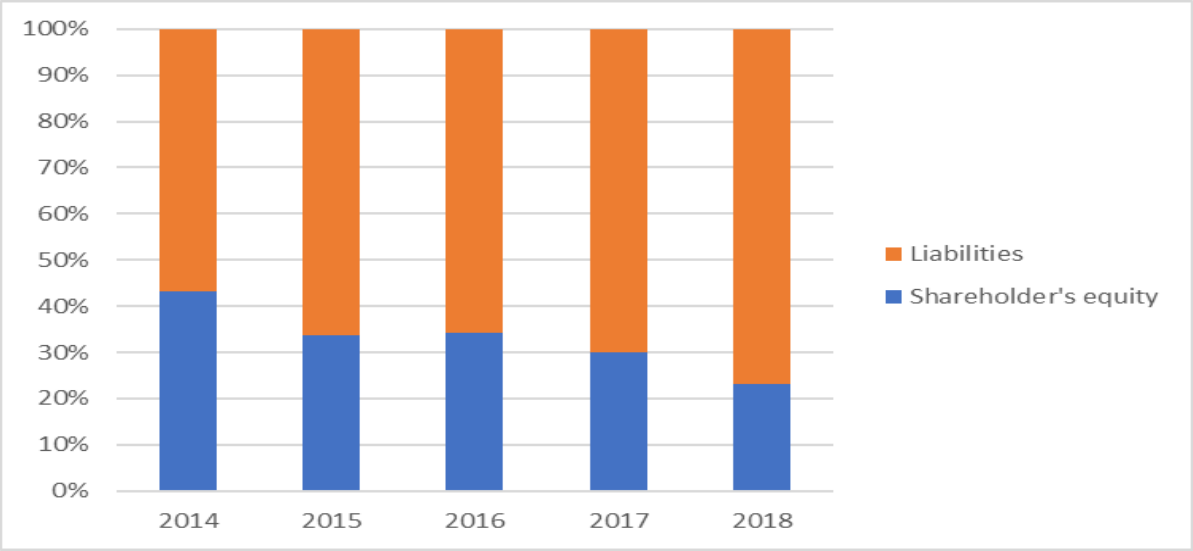
To begin with, we calculate the percentage of selected financial item in the entire item and make it a table. Then according to the table we can draw a chart to show you the clear proportion of selected financial item. First I will show you the table and chart of balance sheet.

Tab 3.5 The proportion of each item in total capital.

	2014	2015	2016	2017	2018
Shareholder's equity	43.24%	33.8%	34.16%	30%	23.21%
Liabilities	56.76%	66.2%	65.84%	70%	76.79%
Total equity and liabilities	100%	100%	100%	100%	100%

From this table we can know the specific percentage of equity and liabilities. And we can also find how much capital is from shareholder's equity and how much is from liabilities. After this I will show you the chart of this data and we can see the trend of change clearly.

Chart 3.1 Vertical common-size analysis in total capital



From this chart we can see clearly that the proportion of liabilities increases consistently which means that the Kofola company borrows more and more money to finance their assets rather than using the equity. And this situation also indicates that the Kofola company is facing the big pressure of repaying debts. What's more, we can see that the shareholder's equity is decreasing from year to year which is not a good singal for a company. Because the decreasing

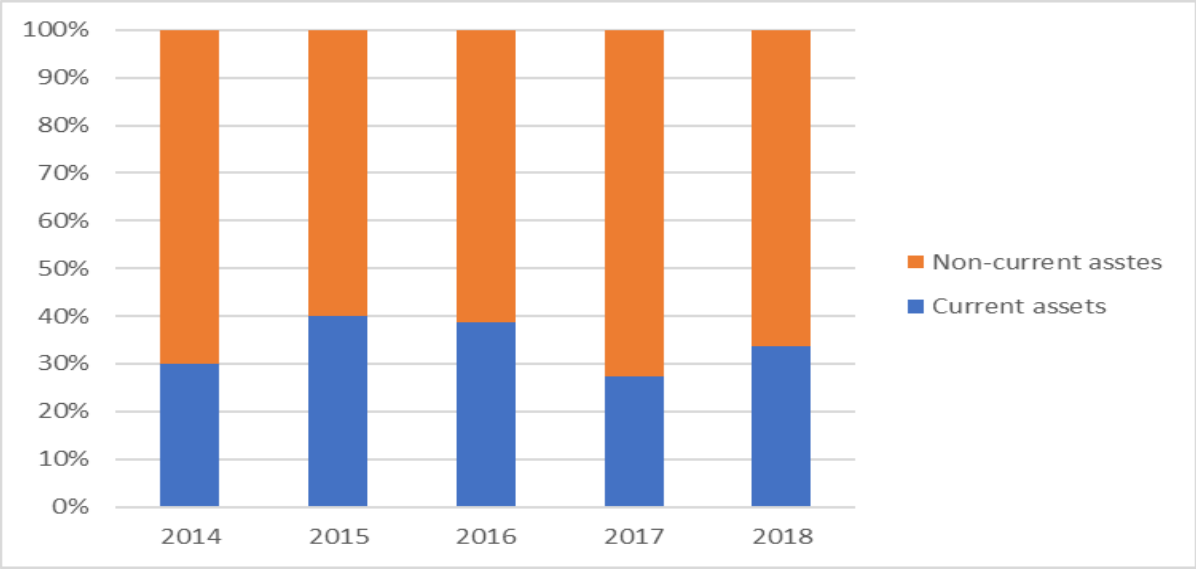
equity means that the company makes their shareholders lose and the price of share will decrease as well. Therefore, if the situation remains for a long time, the shareholder will lose their confidence to this company. However, every coin has two sides, the increasing liabilities and decreasing euqity are not always bad. Due to the increasing liabilities and decreasing equity, the company's management and decision-making will become fluent and smooth compared to the high proportion of equity.

After analyzing liabilities and equity, we will continue to assess the proportion of current assets and long-term assets. And the table is shown as Tab 3.6 and the chart is shown as Chart 3.2.

Tab 3.6 The proportion of each item in total assets

	2014	2015	2016	2017	2018
Current assets	30.00%	39.99%	38.70%	27.25%	33.74%
Non-current assets	70.00%	60.01%	61.30%	72.75%	66.26%
Total assets	100%	100%	100%	100%	100%

Chart 3.2 Vertical common-size analysis of total assets



From the table 3.6 and chart 3.2 we can see that the change of proportion of current assets and non-current assets are not very big. The biggest change is around 10%. So we can say that the management of assets is stable. However even the change is very small, we can find that

the proportion of current assets has a relatively big increase in 2015 and 2016. And the main change happens in the item of cash and cash equivalents. But as we learn in the class, keeping cash in hand brings nothing to the company. I think the reason for keeping cash in hand is doing preparation for paying back the debts. Because there is a big increase in current liabilities in 2015 and 2016 compared to 2014.

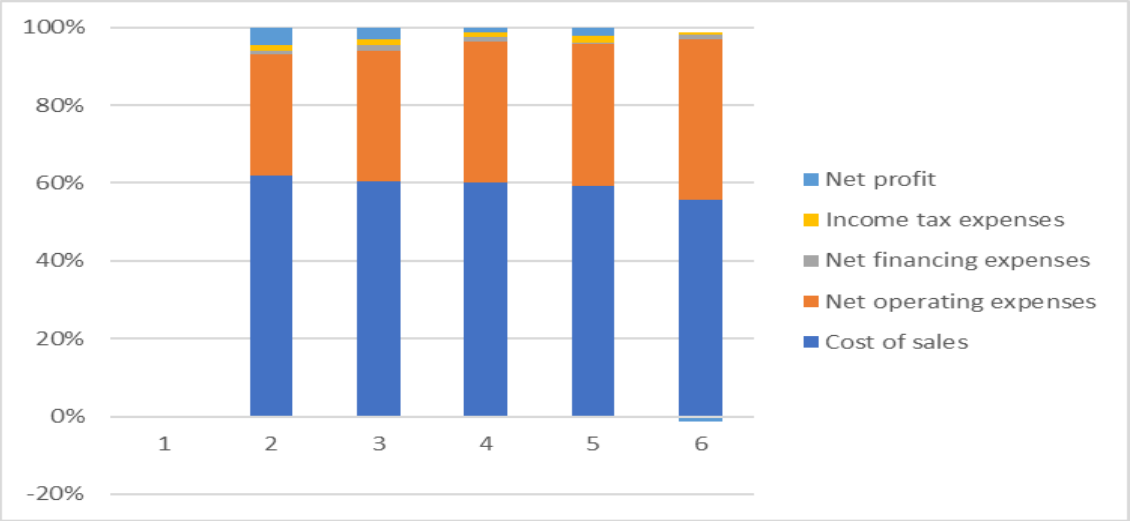
I also find that the value of non-current liabilities increases from 2014-2018. But the non-current assets are not always increasing. It is a little strange that company usually borrow long-term debts to finance long term currents. So we can say that the Kofola company does not make full use of the long term debts efficiently.

Then I will use the same way to analyze the income statement with the vertical common-size analysis. First I will show you the table of proportion of each item in revenue.

Tab 3.7 The proportion of each item in revenue

	2014	2015	2016	2017	2018
Cost of sales	61.85%	60.51%	60.16%	59.37%	57%
Net operating expenses	31.09%	33.42%	36.07%	36.44%	42%
Net financing expenses	1.17%	1.57%	1.34%	0.36%	1%
Income tax expenses	1.26%	1.30%	1.24%	1.65%	1%
Net profit	4.62%	3.20%	1.19%	2.19%	-1%
Revenue	100%	100%	100%	100%	100%

Chart 3.3 Vertical common-size analysis of revenue



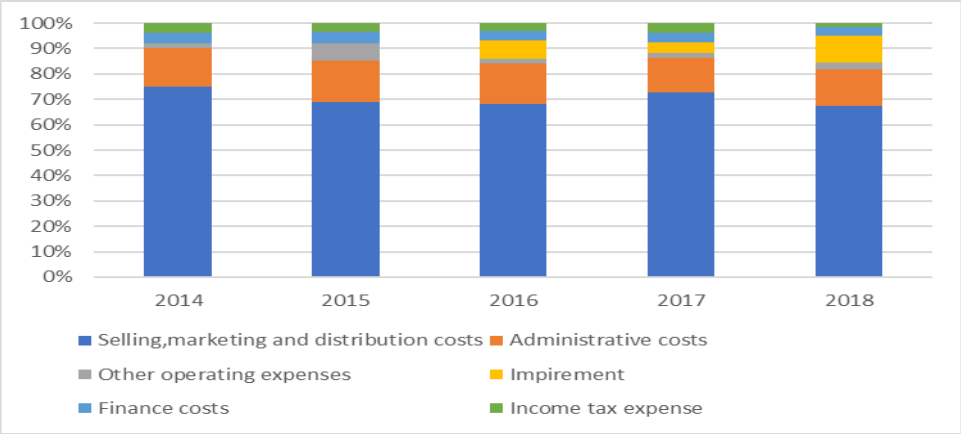
From the table and chart, we can obviously see that the cost of sales occupies a large proportion of revenue. Nearly 60% of revenue is consumed by the cost of sales. But it does not change a lot during 2014-2018. So we can say that the proportion of cost of sale is constant from 2014 to 2018. However, the proportion of net operating expenses increases slowly theses years. Compared to the base year 2014, the proportion of operating expenses increases about 10% in 2018. The proportion of net profit has a opposite situation compared to the operating expenses. The trend of the proportion of net profit is decreasing these years. In 2018 the proportion of operating expenses even become negative. The reason for the negative proportion of net profit is that the increasing operating expenses, especially the huge increases in the impairment which causes the loss of the company.

Next we are going to assess the proportion of expenses. I will show you the calculated results as a form of table and chart.

Tab 3.8 The proportion of each item in expenses

	2014	2015	2016	2017	2018
Selling expenses	75.18%	69.05%	68.23%	72.53%	67.38%
Administrative costs	14.87%	16.25%	15.89%	13.70%	14.37%
Other operating expenses	1.89%	6.58%	2.01%	2.15%	2.59%
Impairment	0	0	7.03%	3.89%	11%
Finance costs	4.36%	4.73%	3.75%	3.75%	3.53%
Income tax expense	3.71%	3.39%	3.11%	3.97%	1.53%

Chart 3.4 Vertical common-size analysis of expenses



We can find that the selling expenses occupy a large proportion of expenses. It occupies

around 70% percent of total expenses every year from 2014 to 2018. As for the administrative costs, they do not change much either and occupy around 15% every year during 2014-2018. The biggest change of proportion belongs to the impairment which increases 10% in 2018 compared to 2014. And the rest of the expenses occupy very small proportion and do not change much in theses years. Overall, the expenses of these years are stable.

3.3 Financial ratio analysis

In this pare we will analyze the financial ratios which we have mentioned in chapter 2 to assess the Kofola company's financial situation. As we know there are four basic financial ratios: profitability ratio, liquidity ratio, solvency ratio and assets management ratio. However we will set profitability ratio aside and use the other three financial ratios to analyze the financial situation of Kofola company. Because we will focus on profitability ratio in chapter 4.

3.3.1 Liquidity ratio

The current ratio is the ratio of current assets relative to current liabilities. It is used to measure the ability of a company's current assets converted into cash for repayment of liabilities before the short-term debt expires. Generally speaking, the higher the liquidity ratio is, the stronger ability of repaying the short-term debts. We calculate the current ratio, quick ratio and cash ratio to assess the Kofola company's ability to meet the short-term debts. And the results are shown in table 3.9.

Tab 3.9 Liquidity ratio of Kofola company during 2014-2018

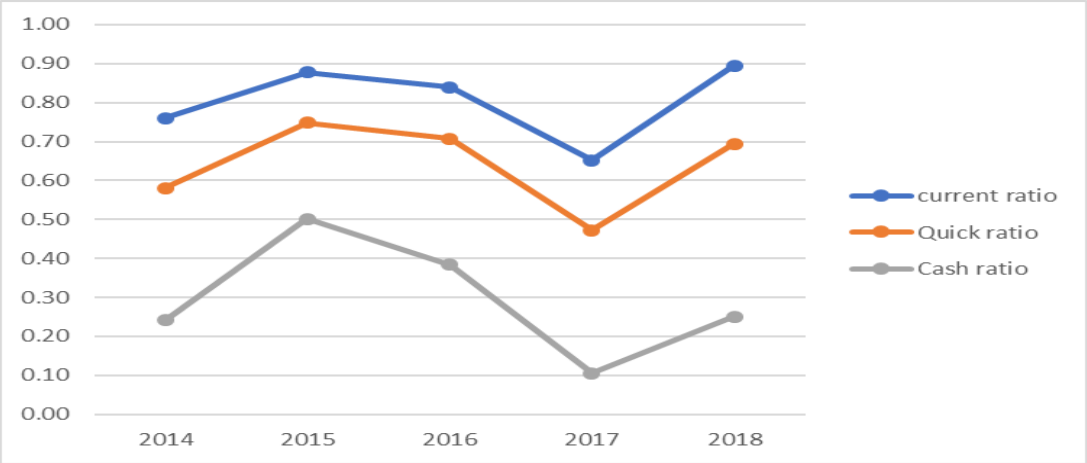
	2014	2015	2016	2017	2018
Current ratio	0.76	0.88	0.84	0.65	0.90
Quick ratio	0.58	0.75	0.71	0.47	0.69
Cash ratio	0.24	0.50	0.38	0.11	0.25

We can find that the Kofola's ability to meet the short-term debts is weak. Because none of the liquidity ratios are higher than one, even the current ratio which is not a very stringent test. So we can say that the Kofola company dose not have enough current assets if they meet

the problem of paying back the debts in the near future. As for quick ratio and cash ratio, we can see that the number of them is lower than the current ratio. It is reasonable because the latter two ratios are more strict on the ability of repaying debts.

Then I will show you the figure of these ratios so we can see clearly the trend and volatility of them.

Figure 3.3 Liquidity ratios of Kofola company during 2014-2018



From this figure we can see very clearly that the trend of each liquidity ratios are very similar. They all increase from 2014-2015 and decrease from 2015-2017 and increase again during 2017-2018. And compared to current ratio and quick ratio, the cash ratio has a big volatility during these years, which represents that the ability of repaying debts of Kofola company is not very stable. It has a high chance that the Kofola company can not repay the short-term debts on time.

3.3.2 Solvency ratio

Solvency ratio is the ratio that measures a company's ability to meet its long-term liabilities. The lower of a company's solvency ratio is, the higher probability the company to default on its debt. We calculate debt ratio, debt to equity ratio and interest coverage and show the results in table 3.10.

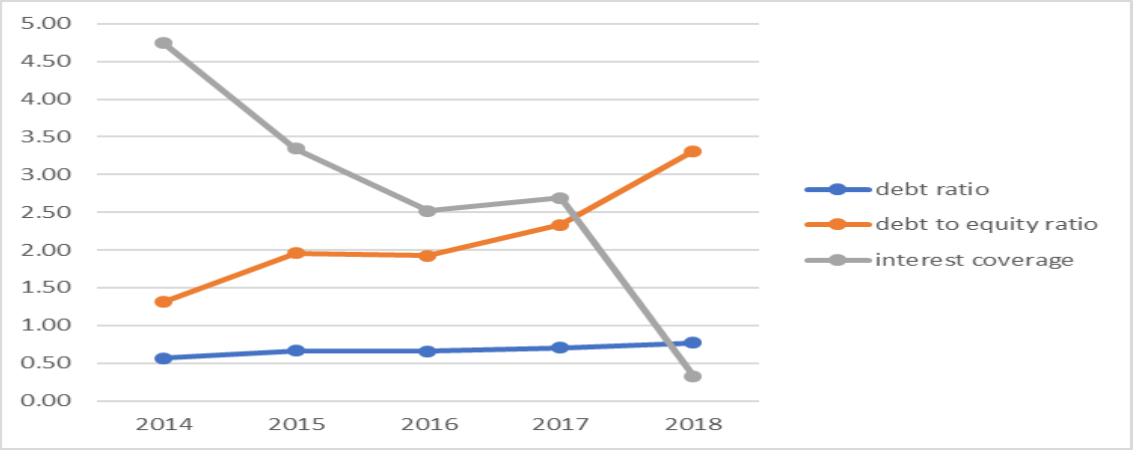
Tab 3.10 Solvency ratio of Kofola company during 2014-2018

	2014	2015	2016	2017	2018
Debt ratio	0.57	0.66	0.66	0.70	0.77
Debt to equity ratio	1.31	1.96	1.93	2.33	3.31
Interest coverage	4.75	3.34	2.52	2.69	0.33

We can see from this table that the Kofola company has a good debt ratio. Because the number of debt ratio is lower than one during these years which means that there is a good proportion of the Kofola company's assets that are financed by the equity. As for the debt to equity ratio, we can see that they are all higher than one which means that the company's use more debt rather than the equity to finance assets. The higher the debt to equity ratio is, the higher risk the company will face. And as for the interest coverage, we can see that it decreases from 2014-2018 which is not a good situation for Kofola company.

Then I will show you the results as a form of figure to see the trends and volatility of solvency ratios.

Figure 3.4 Solvency ratios of Kofola company during 2014-2018



It is obvious to see that the interest coverage ratio has a huge decrease during these years due to the decrease of earing before interest and tax. In 2018 all the earing before interest and tax are consumed by the interest paid which do much harm to Kofola company. As for debt to equity ratio, the trend is increasing during there years which is also bad for Kofola company because the higher of debt to equity ratio, the higher pressure of paying back the debts. The debt ratio is stable from 2014-2018.

3.3.3 Assets management ratio

Assets management ratio is the key to analyze the effectiveness and efficiency of a company managing its assets. Here we calculate the results of average collection period, accounts receivable turnover, total assets turnover, inventory turnover, days of inventory on hand, days of sales outstanding, payables turnover and number of days of payables. I will show you the results in the form of table and figure.

Tab 3.11 Assets management ratio of Kofola company from 2014-2018

	2014	2015	2016	2017	2018
Account receivable turnover	3.35	2.07	1.74	1.68	1.70
Total assets turnover	0.46	0.25	0.21	0.24	0.27
Inventory turnover	3.71	2.15	1.92	1.86	1.79
Payables turnover	0.43	0.24	0.21	0.29	0.31
Average collection period	45.53	47.01	55.64	51.40	55.38
Days of sales outstanding	846.40	1498.06	1702.47	1257.99	1196.41
Number of days of payables	108.83	176.26	210.29	217.62	214.24
Days of inventory on hand	3.71	2.15	1.92	1.86	1.79

From the table we can see that the trends of all the turnover ratios are decreasing. The decreasing account receivable turnover means that the collection process of Kofola company is not as good as before. The decreasing payables turnover means that it will takes longer time for Kofola company to pay back the money. And the other three indicators, average collection period, days of sales outstanding and number of days of payables are increasing during these years which are also not good for a company. The increasing ACP means that the Kofola company need spend more time to receive the account receivables and the increasing of sale outstanding means that the Kofola company need spend more time to collect payment after the sale. The increasing number of days of payables means that it will takes longer time for Kofola company to pay the money to its suppliers. So the only good situation is the decreasing days of inventory on hand, which means that the company takes fewer time to sell the inventories.

Then I will show you two figures to see the trends and volatility of these indicators.

Figure 3.5 Assets management ratios of Kofola company during 2014-2018

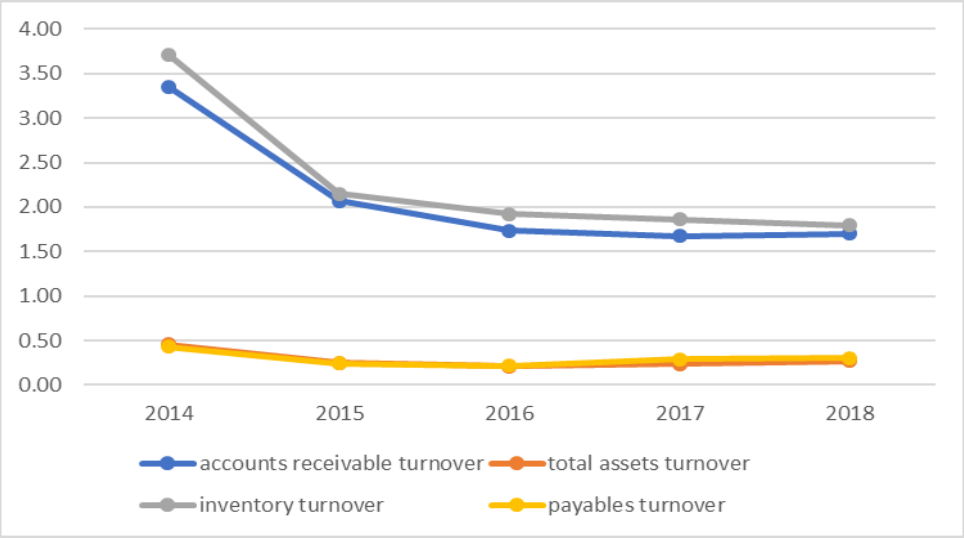
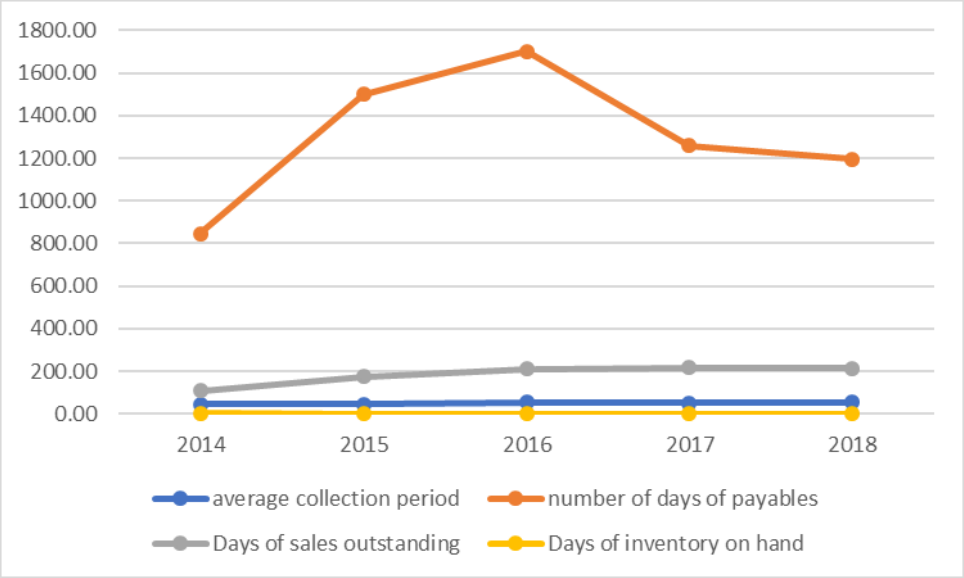


Figure 3.6 Assets management ratios of Kofola company during 2014-2018



From these two figures we can see clearly the trends and volatilities of the assets management ratios. We can find that account receivable and inventory turnover decrease a lot and payables turnover keeps relatively constant. And the number of days of payables has a little big volatility and changes a lot compared to the average collection period, days of sales outstanding and days of inventory on hand. These three indicators keep stable during these years.

4. Profitability Assessment

In this chapter, we will focus on the profitability ratios to assess the Kofola company's ability of generating profit. We not only use the ratio analysis but also use the pyramidal decomposition to analyze it. Therefore, it is a very important chapter of my thesis.

We have already described the other three important financial ratios in the previous chapter. And in this part, we will concentrate on the profitability ratio to assess Kofola's ability of generating profit.

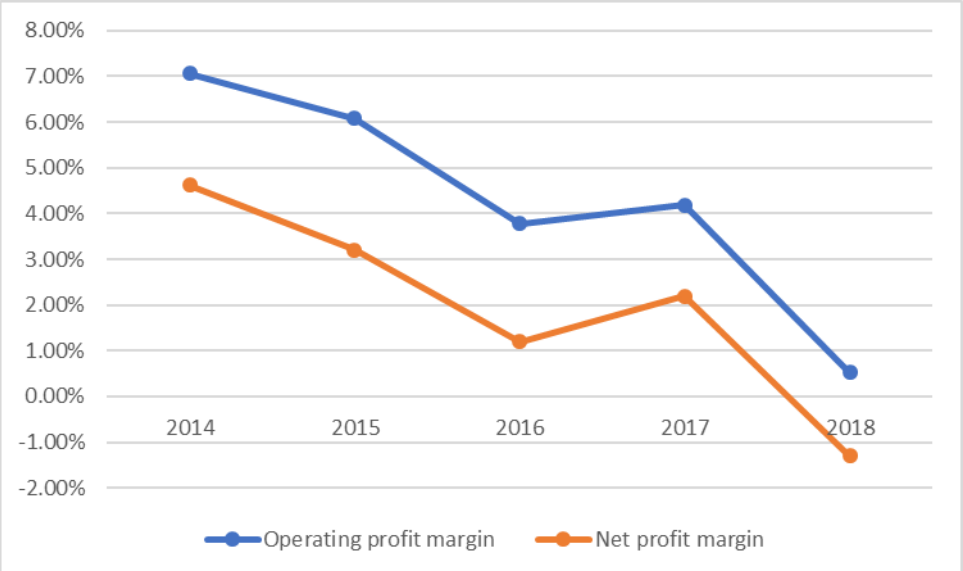
We calculate operating profit margin (OPM), net profit margin (NPM), return on assets (ROA) and return on equity (ROE) four main profitability ratios during 2014-2018 to assess the Kofola's ability of profitability.

First, I will show you the results of OPM and NPM in the form of table and figure during 2014-2018. And we analyze the change, trends and volatility of these two ratios.

Tab 4.1 Profitability ratio of Kofola company during 2014-2018

	2014	2015	2016	2017	2018
OPM	7.06%	6.07%	3.77%	4.19%	0.53%
NPM	4.62%	3.20%	1.19%	2.19%	-1.31%

Figure 4.1 Profitability ratio of Kofola company during 2014-2018



Before analyzing the data from the table and figure, let me repeat the meaning of operating profit margin and net profit margin. The OPM measures that how much profit can a company

get after paying the costs of sales but before paying the interest. And the NPM means that how much profit is generated as a percentage of revenue.

From the table and figure we can see that both of OPM and NPM are decreasing from 2014 to 2018. The decreasing trend of these two ratios represent that the ability of generating profit of Kofola company is weaker and weaker. This is because the increasing speed of revenue is lower than the increasing speed of net operating expenses. I think it is connected with the low price level of non-alcohol beverage during 2014-2016. In those years the CPI of non-alcohol beverage is very low even negative. So the non-alcohol beverage companies can not make much profit due to the low price level. And with the increasing wages of labors and money on advertisement, the speed of increasing net operating expenses beyond the speed of increasing revenue, which causes the decreasing profitability ratios.

And we can also find during 2016-2017, the situation gets better than before. I think it is connected with the increasing price level and also the decreasing administrative costs. Maybe the Kofola company reduce the administrate employees' salary or it fires amount of administrate works. Anyway, we can see that the Kofola company try to control the bad situation and makes is better.

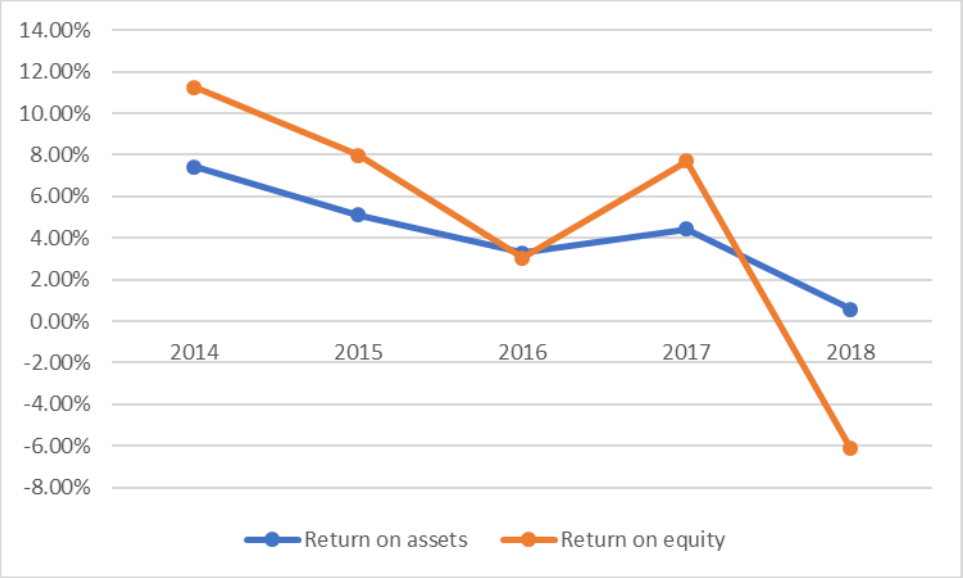
But during 2017-2018, the situation gets worse due to the huge increase in administrate costs and impairment. I calculate that the speed of increasing revenue is around 2% but the increasing speed of net operating expenses is around 20%.

Then we will analyze the return on assets and return on equity. First let me explain briefly what is return on assets and what is return on equity again. Return on assets measures that how much profit a company can make from its assets. And similarly return on equity means how much profit a company can make from its net assets. Because equity equals to total assets minus total liabilities. And I will show you the results of ROA and ROE during 2014-2018 in the form of table and figure.

Tab 4.2 Profitability ratio of Kofola company during 2014-2018

	2014	2015	2016	2017	2018
ROA	7.43%	5.12%	3.29%	4.43%	0.57%
ROE	11.26%	7.98%	3.04%	7.71%	-6.11%

Figure 4.2 Profitability ratio of Kofola company during 2014-2018



From the table and figure we can see that the whole trend of return on assets and return on equity is decreasing. It represents that the ability of profitability of Kofola company is getting worse. Less and less profit will be generated by average one percent of assets and equity. We can see that the return on equity is even negative in 2018, which means that the company loses money from average one percent of net assets. We can also find that the volatility of return on equity is a little bit big which means that the profitable ability of Kofola company is not very stable.

The decreasing of first three year is due to the rapid development of assets. As I find that during 2014-2015, the total assets increase about 40%. However, the operating and net profit for the period is decreasing which lead to the decrease of the return on assets and return on equity. And we can find that situation gets better during 2016-2017 which is same as the two profitability ratios we have talked above. The operating and net profit increases and assets decrease and it leads the increase of the return on assets and equity.

From 2017-2018, we can see that the return on equity has a huge decrease during these years and we want to know the reasons which cause this huge decrease. I find that the gross profit of 2018 is the highest during 2014-2018. But the net profit is negative which is a very surprising result. I find that so much profit is consumed by the increasing operating expenses and in the end the operating profit is the lowest during 2014-2018. So the rapid development of operating expenses are the key factor which causes the decrease of return on equity.

4.1 Pyramidal decomposition analysis of Kofola company

In this part we will use the method pyramidal decomposition analysis to assess Kofola's ability of profitability deeply. Because the principle of pyramidal decomposition is to decompose one basic ratio into many component ratios so that we can find which part has the biggest influence to the company. Therefore we also need influence quantification method to analyze the influence of changes of component ratios. After finding the ratio which has the biggest impact to the company, we can make accurate and precise decision to improve it and make company better.

In this part we will use these two methods to analyze the return on equity and we will decompose ROE into five component ratios. And I use the gradual change method to calculate the influence of each component ratio to the ROE. And I will show you the results in the form of table.

Tab 4.3 Influence of each component ratio to the ROE during 2014-2015

	2014	2015	Influence	Order
EAT/EBT	0.785	0.711	-1.07%	5
EBT/EBIT	0.834	0.741	-1.13%	4
EBIT/Rev	0.071	0.061	-1.26%	3
Rev/A	1.053	0.843	-1.55%	2
A/E	2.313	2.958	1.74%	1
Sum			-3.28%	

Tab 4.4 Influence of each component ratio to the ROE during 2015-2016

	2015	2016	Influence	Order
EAT/EBT	0.711	0.489	-2.48%	1
EBT/EBIT	0.741	0.646	-0.71%	3
EBIT/Rev	0.061	0.038	-1.81%	2
Rev/A	0.843	0.873	0.11%	4
A/E	2.958	2.928	-0.03%	5
Sum			-4.93%	

Tab 4.5 Influence of each component ratio to the ROE during 2016-2017

	2016	2017	Influence	Order
EAT/EBT	0.489	0.570	0.50%	5
EBT/EBIT	0.646	0.915	1.48%	1
EBIT/Rev	0.038	0.042	0.56%	4
Rev/A	0.873	1.058	1.19%	2
A/E	2.928	3.333	0.94%	3
Sum			4.67%	

Tab 4.6 Influence of each component ratio to the ROE during 2017-2018

	2017	2018	Influence	Order
EAT/EBT	0.570	2.156	21.44%	3
EBT/EBIT	0.915	-1.145	-65.62%	1
EBIT/Rev	0.042	0.005	31.86%	2
Rev/A	1.058	1.085	-0.11%	5
A/E	3.333	4.308	-1.38%	4
Sum			-13.82%	

From the figures above we can see the influence of each component ratio to the basic ratio. And we can find that the biggest influence of component ratio changes from year to year. During 2014-2015, the component ratio which has big impact on the basic ratio is assets divided by equity So the company should focus on the portion of assets that are financed by shareholder's equity. However during 2015-2016, the ratio which has a big influence to the basic ratio is net

profit divided by earing before tax. So the firm should focus on the earning before taxation. And during the next year, the biggest influent ratio changes to earning before tax divided by operating profit. Then the company should pay attention to the operating profit.

But from the decomposition, we just know the influence of each component ratio to the basic one but we do not know the specific part of each component ratio. Therefore we need to make the further decomposition to know the specific thing of each part and we can give the accurate suggestion to the Kofola company.

Here we will decompose three component ratios further. They are earing before interest and tax divided by revenue (EBIT/Rev), revenue divided by total assets (Rev/A) and total assets divided by equity (A/E). And before I show you the result of the further decomposition, let me explain something. We use "TC/Rev" to represent "Total cost/Revenue", "TI/Rev" represent " Total income/Revenue, "FA/Rev·360" represent " (Fixed assets/Revenue)·360", "CA/Rev·360" represent "(Current assets/Revenue)·360", "LD/E" represent "Long-term debt/Equity" and "SD/E" represent " Short-term debt/Equity". And I will show you the result of the further decomposition of ROE in table 4.7.

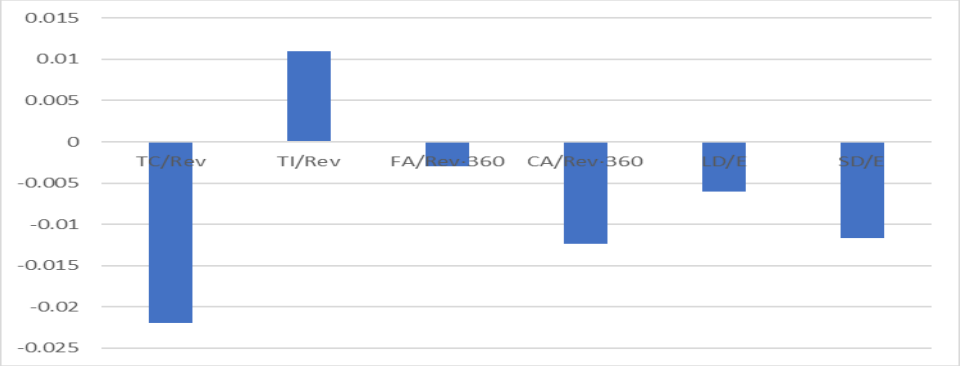
Tab 4.7 Pyramidal decomposition of return on equity during 2014-2015

	Influence	Order
TC/Rev	-0.022	1
TI/Rev	0.011	4
FA/Rev·360	-0.003	6
CA/Rev·360	-0.0124	2
LD/E	-0.006	5
SD/E	-0.0117	3
SUM	-0.011	

From the table we can see that the TC/Rev has the biggest impact on the change of ROE which leads the drop of ROE for -0.022. And the second one is CA/Rev·360, it also has a negative influence on ROE for -0.0124. The third one which also has a negative influence on ROE is SD/E. The contribution to change of ROE is -0.0117. The fourth TI/Rev has a positive influence on the change of ROE and it is also the only ratio which has the positive effect on the

change of ROE. And the contribution to change of ROE is 0.009. The next one is LD/E which has a negative effect on the change of ROE for -0.006. The last one which has the smallest influence on the change of ROE is FA/Rev·360. It has only -0.003 negative effect on the change of ROE.

Figure 4.3 Diagram analyses of influences during 2014-2015



From the figure we can see that there is only one positive ratio which is TI/Rev and the other four are all negative ratios. That's the reason why the change of ROE is negative during 2014-2015. And because the TC/Rev has the biggest negative influence on the change of ROE, the Kofola company must focus on it and take measures to reduce the negative effect caused by the change of TC/Rev. And the Kofola company should also concentrate on the CA/Rev·360 and SD/E which also have a big negative effect on the change of ROE.

Then I will show you the details of the ratio which has a big influence on the change of ROE in the table.

Tab 4.8 Items which have influence on component ratio TC/Rev during 2014-2015

	Influence	Order
Selling,marketing costs/Rev	-0.005	3
Administrative costs/Rev	-0.006	2
Other operating expenses/Rev	-0.01	1

From the table we can see that there three items which cause the influence to the component ratio TC/Rev. They are selling and marketing costs/Rev, administrative costs/Rev and other operating expenses/Rev. And the other operating expenses has the biggest influence to the TC/Rev. So if Kofola company wants to control the influence of TC/Rev to the change of ROE, it must take control of the other operating expenses/Rev.

Tab 4.9 Items which have influence on component ratio CA/Rev·360 during 2014-2015

	Influence	Order
Trade receivables/Re ·360	-0.0003	2
Cash and cash equivalents/Re ·360	-0.012	1
Inventories/Rev·360	-0.0002	3
Income tax receivables/Rev 360	-0.0001	4
Assets as held for sale/Rev·360	-0.00003	5

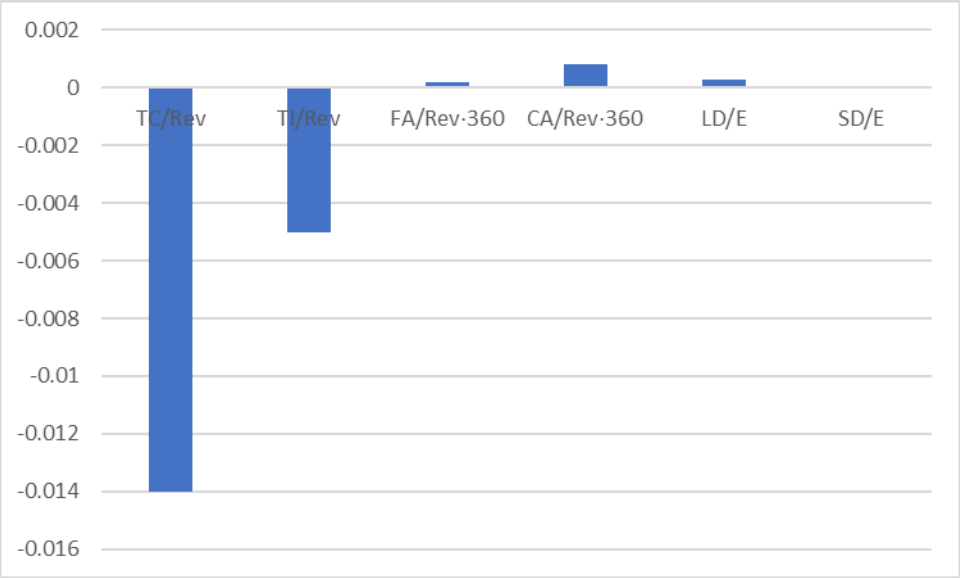
From the table we can see that in CA/Rev·360, the specific item which has the biggest influence is Cash and cash equivalents/Rev·360. So the Kofola company need to concentrate on this specific item to control and reduce its influence to CA/Rev·360. And the other four specific items have very small influence to the component ratio. Therefore, the Kofola does not need to take much effort to deal with them.

Tab 4.10 Pyramidal decomposition of return on equity during 2015-2016

	Influence	Order
TC/Rev	-0.014	1
TI/Rev	-0.005	2
FA/Rev·360	0.0002	5
CA/Rev·360	0.0008	3
LD/E	0.0003	4
SD/E	0.00002	6
SUM	-0.017	

From the table we can see that the sum of the influence is severer than last year even though during this year the Kofola company has two positive influence of component ratios. We can also find that the component ratio which has the biggest effect on the return on equity is still the TC/Rev. It contributes -0.014 to the basic ratio. Then I will show you the figure of the data.

Figure 4.4 Diagram analyses of influences during 2015-2016



From the figure that there are two component ratios which make negative effect to the ROE, they are TC/Rev and TI/Rev and four component ratios making positive influence to the ROE, they are FA/Rev·360, CA/Rev·360, LD/E and SD/E. However the situation is bad because the sum of negative influence is much higher than the positive one. Compared to last year's figure we can see that the Kofola company makes effort on controlling the influence of FA/Rev·360, CA/Rev·360, LD/E and SD/E and it did make progress. But the Kofola company ignores the most important one which is TC/Rev. So the change of ROE during this year is worse than the last year. And we will also to find which specific item has the biggest influence on TC/Rev.

Tab 4.11 Items which have influence on component ratio TC/Rev during 2015-2016

	Influence	Order
Selling,marketing costs/Rev	-0.005	3
Administrative costs/Rev	-0.001	4
Other operating expenses/Rev	0.012	2
Impairment	-0.019	1

From the table we can see there is a new item appearing in the table which is impairment. And it has the biggest influence to the component ratio. And we can also find that there is a

positive influence which comes from the other operating expenses/Rev item. It is different from the last year's data. So we can know that the Kofola company tries to improve the situation. And in this year the Kofola company should focus on the new item impairment because it make a contribution of -0.019 to the TC/Rev which is the biggest.

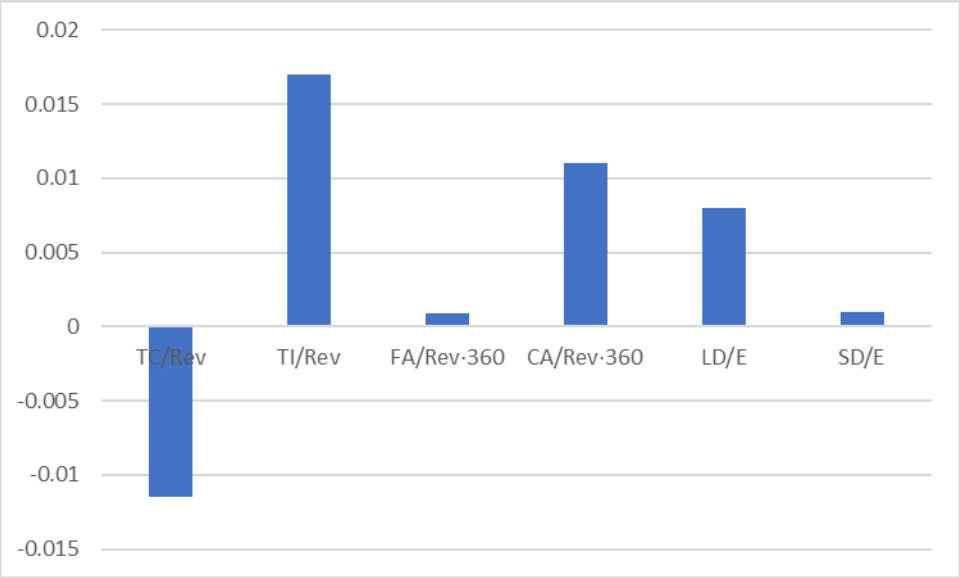
Then we will analyze the next year's component ratio of ROE and the specific items of component ratio which has the biggest influence to the basic raio.

Tab 4.12 Pyramidal decomposition of return on equity during 2016-2017

	Influence	Order
TC/Rev	-0.0115	2
TI/Rev	0.017	1
FA/Rev·360	0.0009	6
CA/Rev·360	0.011	3
LD/E	0.008	4
SD/E	0.001	5
SUM	0.027	

From the table we can find the situation gets better because the sum of influence is positive for the first time during these years. And TI/Rev has the biggest positive effect on the basic ratio ROE which contributes 0.017 to it. And there is only one negative influence which come from TC/Rev. It contributes -0.0115 to the basic ratio. Compared to the past years, this year's data is much better and it indicates that the Kofola company makes great progress during this year. And I will show you the data in the form of figure.

Figure 4.5 Diagram analyses of influences during 2016-2017



From the figure we can see that compared to the past years, the Kofola company makes huge progress during this year., There are five component ratios which has positive influence to ROE. They are TI/Rev, FA/Rev·360, CA/Rev·360, LD/E and SD/E. And only one component ratio has negative influence to the basic ratio and it is TC/Rev. Therefore we will focus on TC/Rev to see which specific item has the biggest influence to TC/Rev. And I will show the items in the following table.

Tab 4.13 Items which have influence on component ratio TC/Rev during 2016-2017

	Influence	Order
Selling,marketing costs/Rev	-0.032	1
Administrative costs/Rev	0.008	3
Other operating expenses/Rev	-0.001	4
Impairment	0.014	2

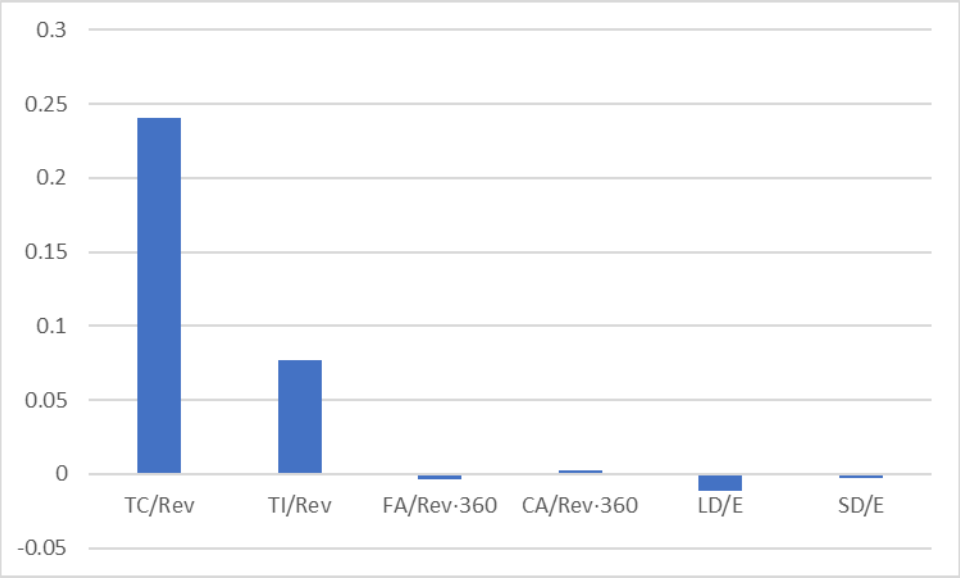
From the table we can see that the selling and marketing costs/Rev has the biggest negative influence to the component ratio TC/Rev, which contributes -0.032 to the component ratio. And another negative influence come from other operating expenses/Rev which makes contribution to the component ratio for -0.001. So the Kofola company should pay attention to these two specific items to control the negative influence.

Then we will continue to analyze the results during 2017-2018.

Tab 4.12 Pyramidal decomposition of return on equity during 2017-2018

	Influence	Order
TC/Rev	0.241	1
TI/Rev	0.077	2
FA/Rev·360	-0.004	4
CA/Rev·360	0.0028	6
LD/E	-0.011	3
SD/E	-0.003	5
SUM	0.304	

From the table we can find that the TC/Rev still has the biggest influence to the basic ratio ROE. It makes contribution to ROE for 0.241. It is a huge increase compared to the last year. It indicates that the Kofola company take measures effectively to control the influence caused by TC/Rev. However there are still some negative influence caused by FA/Rev·360, LD/E and SD/E. For see the change clearly, I will show you the figure of the results.



From the figure we can see clearly that the positive influence from TC/Rev and TI/Rev are very big and the negative influence from FA/Rev·360, LD/E and SD/E are small. So we mainly focus on the LD/E which has relatively higher negative influence compared to others. And to find which factor has the biggest influence to the LD/E. So I will show you the specific item of LD/E in the table.

Tab 4.13 Items which have influence on component ratio LD/E during 2017-2018

	Influence	Order
Bank credit and loans/E	-0.011	1
Finance lease liabilities/E	-0.00003	5
Other liabilities/E	-0.00026	4
Deferred tax liabilities/E	0.00028	3
Provisions/E	0.00029	2

From the table we can find that there are three of the items has negative influence on the component ratio LD/E. They are Bank credit and loans/E, Finance lease liabilities/E and Other liabilities/E. And the biggest negative influence is caused by the Bank credit and loans/E which contributes -0.011 to the basic ratio. So the Kofola company should focus on this item to control the influence.

5. Conclusion

In summary, this thesis focuses on analyzing the economic condition of Kofola company and finds the problems of Kofola company to make it improve and get better. First we introduce many financial terms and formulas which will be used in this thesis and then we introduce three ways of financial analysis. They are common-size analysis, financial ratio analysis and decomposition analysis. And the following is what we find through these ways of financial analysis.

Through common-size analysis towards balance sheet and income statement of Kofola company, we find that the experience of Kofola company during 2014-2018 is not very good. Because the trend of shareholder's equity and net income is decreasing in these years. The decreasing shareholder's equity represents the run of Kofola company makes its shareholders lose their investment and the decreasing net profit means that the Kofola company will reduce their employees wages and even fires amount of stuffs.

Through financial ratio analysis towards liquidity ratio, solvency ratio and assets management ratio, we find some advantages and disadvantages of Kofola company.

In the aspect of liquidity ratio, the Kofola company's performance is not good. Because none of cash ratio, quick ratio and current ratio's value are higher than one during 2014-2018. It indicates that the ability of Kofola company to pay back its short-term debts is weak.

In the aspect of solvency ratio, we analyze three ratios and they are debt ratio, debt to equity ratio and interest coverage. The Kofola company performs well in debt ratio. Because during 2014-2018, the number of debt ratio is always lower than one which means that the Kofola company has enough assets to repay the long-term liabilities. As for debt to equity ratio and interest coverage, the performance of Kofola company is not good. Because the increasing det-to equity ratio means the company uses more and more debt capital to finance assets and the decreasing interest coverage means that the company uses more and more earnings before interest and tax to pay back the interest. And in aspect of assets management ratio, the Kofola company also performs badly. Almost all the turnover ratios decreasing during 2014-2018.

Through decomposition analysis towards profitability ratio, we decompose ROE into

many component ratios and find out which component ratios has the biggest influence to the ROE. And we find that there is one financial item that must be paid attention to which is TC/Rev. Nearly in every during 2014-2018, the TC/Rev has the biggest negative influence to the ROE.

And the trend of ROE is decreasing during these years which indicates the ability of profitability of Kofola company is not good. If the Kofola company want to improve its profitability ability, they must focus on TC/Rev.

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List of Abbreviations

A	Asset
ACP	Average collection period
CA	Current assets
D	Debt
EBIT	Earnings before interest and tax
EBT	Earnings before tax
EAT	Net profit
E	Shareholders' equity
FA	Fixed assets
IT	Inventory turnover
L	Liability
LD	Long-term debts
NPM	Net profit margin
ROA	Return on assets
ROE	Return on equity
Rev	Revenue
SD	Short-term debts
TI	Total income
TC	Total cost
TAT	Total assets turnover

Declaration of Utilisation of Results from the Bachelor Thesis

Herewith I declare that

- I am informed that Act No. 121/2000 Coll. – the Copyright Act, in particular, Section 35 – Utilisation of the Work as a Part of Civil and Religious Ceremonies, as a Part of School Performances and the Utilisation of a School Work – and Section 60 – School Work, fully applies to my diploma (bachelor) thesis;
- I take account of the VSB – Technical University of Ostrava (hereinafter as VSB-TUO) having the right to utilize the diploma (bachelor) thesis (under Section 35(3)) unprofitably and for own use ;
- I agree that the diploma (bachelor) thesis shall be archived in the electronic form in VSB-TUO's Central Library. I agree that the bibliographic information about the diploma (bachelor) thesis shall be published in VSB-TUO's information system;
- It was agreed that, in case of VSB-TUO's interest, I shall enter into a license agreement with VSB-TUO, granting the authorization to utilize the work in the scope of Section 12(4) of the Copyright Act;
- It was agreed that I may utilize my work, the diploma (bachelor) thesis or provide a license to utilize it only with the consent of VSB-TUO, which is entitled, in such a case, to claim an adequate contribution from me to cover the cost expended by VSB-TUO for producing the work (up to its real amount).

Ostrava dated 1. 5. 2019

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Student's name and surname

List of Annexes

Annexes

Annex1: Consolidated Balance sheet of Kofola Company (Unit:CZK in thousand)

Item	2014	2015	2016	2017	2018
Current assets	1787877	3395290	3104020	1792673	2214197
Assets classfied as held for sale	0	3506	111715	0	0
Trade and other receiveables	793602	934452	1081680	994155	1095035
Income tax receiveables	2460	16231	4171	14416	3759
Cash and cash equivalents	568764	1940008	1421014	289594	619300
Inventories	423051	501093	485440	494508	496103
Non-current assets	4171985	5095724	4915863	4786195	4348833
Property,plant and equipment	2823390	3508993	3442624	3384892	2959954
Goodwill	87986	86302	86302	86302	93467
Intangible asstes	1064370	1176524	1164092	1090190	1054524
Investments in associate	181385	155921	67782	70260	66894
Other receviables	11478	56348	51142	70703	118959
Other non-financial assets	396	14833	2440	2317	2261
Deferred tax assets	2980	96803	101481	81531	52774

Total assets	5959862	8491014	8019883	6578868	6563030
Equity and liabilities	CZK'000	CZK'000	CZK'000	CZK'000	CZK'000
Equity attributable to owners of kofola CeskoSlovensko a.s.	2569449	2820969	2736572	1977670	1531669
Share capital	151499	2229500	2229500	2229500	1114597
Share premium and capital reorganisation reserve	0	-1962871	-1962871	-1962871	-1962871
Other reseves	2004024	2085568	2075994	2048985	2438776
Foreign currency translation reserve	235031	166710	165925	37030	28954
Own shares	-2811	0	-915	-491565	-490208
Retained earnings	181706	302062	228939	116591	-215910
Distribution fund			0	0	618331
Equity attributable to non-controlling interests	7380	49233	2896	-3684	-8156
Total equity	2576829	2870202	2739468	1973986	1523513
Current	2353499	3870143	3700058	2749230	2473925

liabilities					
Bank credits and loans	556708	1637805	1672723	682025	605295
Bonds issued	3707	3657	3668	332513	0
Finance lease liabilities	40607	55600	58603	57573	47490
Trade and other payables	1634692	1975230	1779351	1630999	1697724
Provisions	87480	196452	157235	40820	84480
Income tax liabilities	29980	1399	17562	5300	38936
Other financial liabilities	325	0	10916	0	0
Non-current liabilities	1029534	1750669	1580357	1855652	2565592
Bank credit and loans	456297	994323	880318	1480488	2308429
Finance lease liabilities	74632	199620	167295	112867	88288
Other liabilities	34440	47903	15925	0	28470
Deferred tax liabilities	136702	157998	162745	176814	106342
Provisions	3649	24940	27002	85483	34063
Bonds issued	323814	325885	327072	0	0
Total liabilities	3383033	5620812	5280415	4604882	5039517
Total liabilities and equity	5959862	8491014	8019883	6578868	6563030

Annex2: Consolidated Income statement of Kofola Company (Unit: CZK in thousand)

Item	2014	2015	2016	2017	2018
Revenue from the sale of finished products and services	6199737	6755305	6506401	6409682	6532693
Revenue from the goods and materials	75654	401427	492559	553596	586075
Revenue	6275391	7156732	6998960	6963278	7118768
cost of product and service sold	-3810655	-3968770	-3792363	-3648402	-3550753
cost of good and materials sold	-70704	-361734	-418133	-485679	-506169
Costs of sales	-3881359	-4330504	-4210496	-4134081	-4056922
Gross profit	2394032	2826228	2788464	2829197	3061846
Selling,marketing and distribution costs	-1607706	-1898428	-1910997	-2094727	-2197986
Administrative costs	-317937	-446855	-444957	-395783	-468901
Other operating income	14856	134544	84491	127535	72882
Other operating expenses	-40420	-180810	-56267	-62114	-84392
Impirement	0	0	-196837	-112386	-345754
Operating profit	442825	434679	263897	291722	37695
Finance income	7885	20961	12329	71707	11466
Finance costs	-93247	-129990	-104911	-108391	-115269

Share of profit of associate	11940	-3389	-915	11846	22963
Profit before income tax	369403	322261	170400	266884	-43145
Income tax expense	-79274	-93260	-87000	-114689	-49881
Profit for the period	290129	229001	83400	152195	-93026
Attributable to:					
Owners of Kofola CeskoSlovensko a.s.	290438	227657	86373	158775	-88544
Non-controlling interests	-309	1344	-2973	-6580	-4472
Earnings per share for profit attributable to the ordinary equity holders of the company(in CZK)					
Basic earnings per share	13.16	10.31	3.87	7.12	-3.97
Diluted earnings per share	13.16	10.31	3.87	7.12	-3.97

Annex3: Consolidated Cash flow statement of Kofola Company (Unit: CZK in thousand)

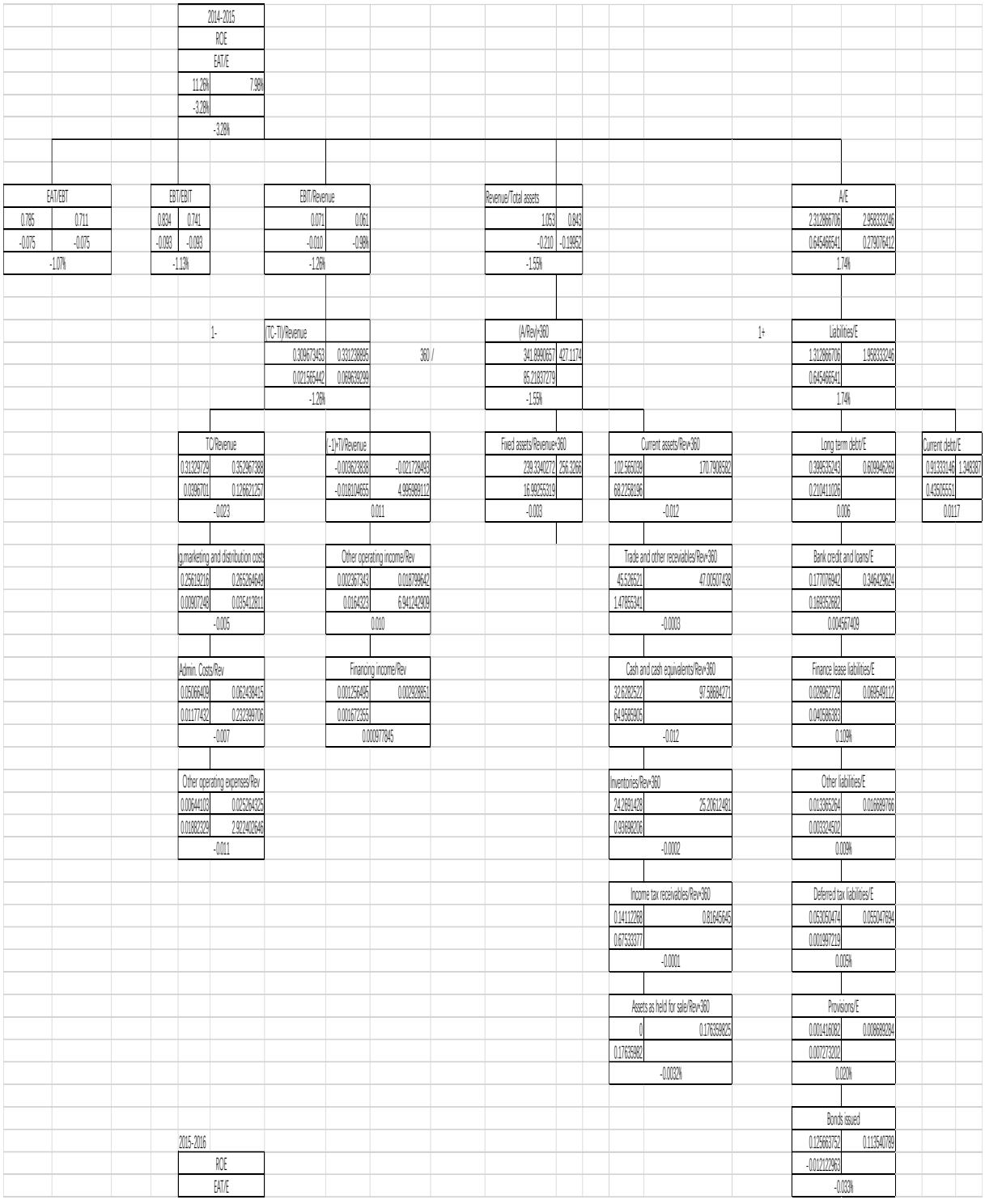
Item	2014	2015	2016	2017	2018
Cash flows from operating activities	369403	322261	170400	266884	-43145
Profit before income tax					
Adjustments for:					
Non-cash movements	471995	513201	523003	565228	567332
Depreciation and amortisation	62805	74666	75492	74425	78346
Net interest	-11940	3389	915	-11846	-22963
Share of result of associate	30408	40595	-46168	-57934	11435
Change in the balance of provisions and adjustments	0	0	196837	112386	214795
Impirement	0	11946	2745	-20275	4593
Derivatives	-9176	-3770	-980	-55326	141654
Gain on sale of PPE and intangible assets	-15455	11873	5039	-1515	3613
Net exchange differences	0	18180	11656	-3087	7376
Other	0	0	0	-18785	-12479
Change in the balance of other impairments					
Cash movements	-74902	-115379	-60535	-100052	-71363

Income taxes paid					
Change in operating assets and liabilities	164221	-68986	-135353	74078	-102393
Change in receivables	-184836	-3450	48357	4295	30325
Change in inventories	159903	130715	-136078	-108481	14029
Change in payables	962426	935241	655330	719995	821155
Net cash inflow from operating activities					
Cash flow from investing activities	51556	14435	11484	78583	106705
Sale of property,plant and equipment	-297647	-397700	-527612	-498916	-395756
Acquisition of property,plant and equipment and intangible assets	0	-44870	-6500	0	0
Purchase of financial assets	2501	0	0	0	0
Sale of investments	0	0	-38089	0	0
Loans granted	-47768	-713305	-201361	0	0
Purchase of subsidiary,excluding cash from take over	24084	4665	1159	701	16212
Dividends and interest received	0	0	12252	0	0

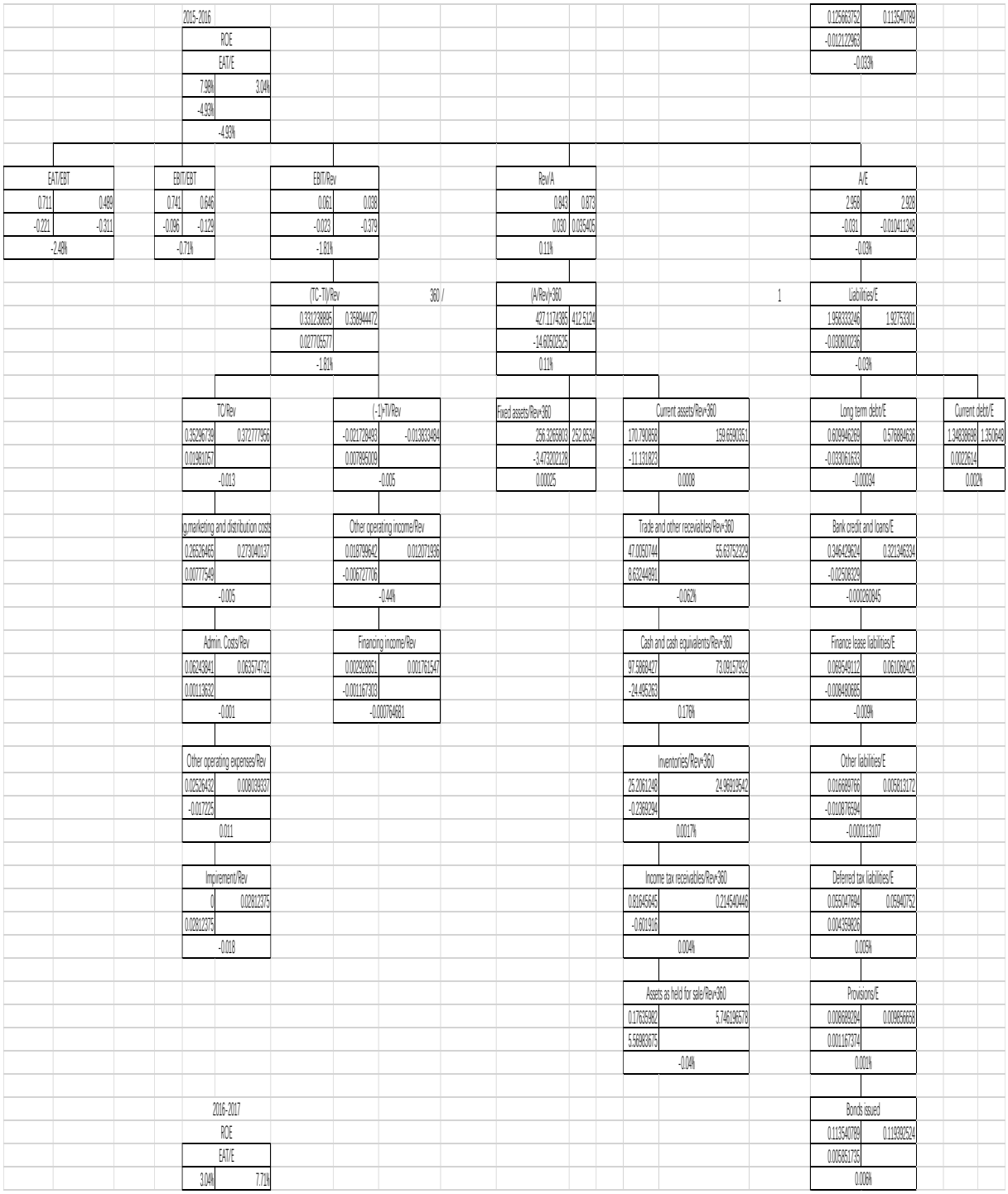
Sale of other securities	25571	0	0	0	0
Repayment of loans	0	0	0	-50831	-116591
Acquisition of subsidiary, net of cash acquired	0	0	0	1500	0
Proceeds from repaid loans	-241703	-1136775	-748667	-468963	-389430
Net cash outflow from investing activities					
Cash flows from financing activities	-72051	-59200	-63379	-62345	-55305
Finance lease payments	318122	2053323	233687	2664454	1324462
Proceeds from loans and bank credits	0	140250	0	0	0
Gross proceeds from the issue of shares	-417760	-425479	-347375	-3078898	-607441
Repayment from loans and bank credits	-112908	-11978	-156051	-311857	-345789
Dividends paid to company's shareholders	0	-2546	0	0	0
Dividends paid to non-controlling interests	-67607	-78460	-77900	-73550	-87619
Interest and bank	0	-38963	-3743	-490650	0

charges paid					
Purchase of own shares	0	0	0	0	0
Derivatives	0	0	0	0	-330000
Repayment of bonds	0	-12310	-5657	0	0
Other	-352204	1564637	-420418	-1352846	-101692
Net cash outflow from financing activities	368519	1363103	-513755	-1101814	330033
Net increase(decrease) in cash and cash equivalents	201669	568764	1940008	1421014	289594
Cash and cash equivalents at the beginning of the period	-1424	8141	-5239	-29606	-327
Effetcts of exchange rate changes on cash and cash equivalents	568764	1940008	1421014	289594	619300
Cash and cash equivalents at the end of the period	369403	322261	170400	266884	-43145

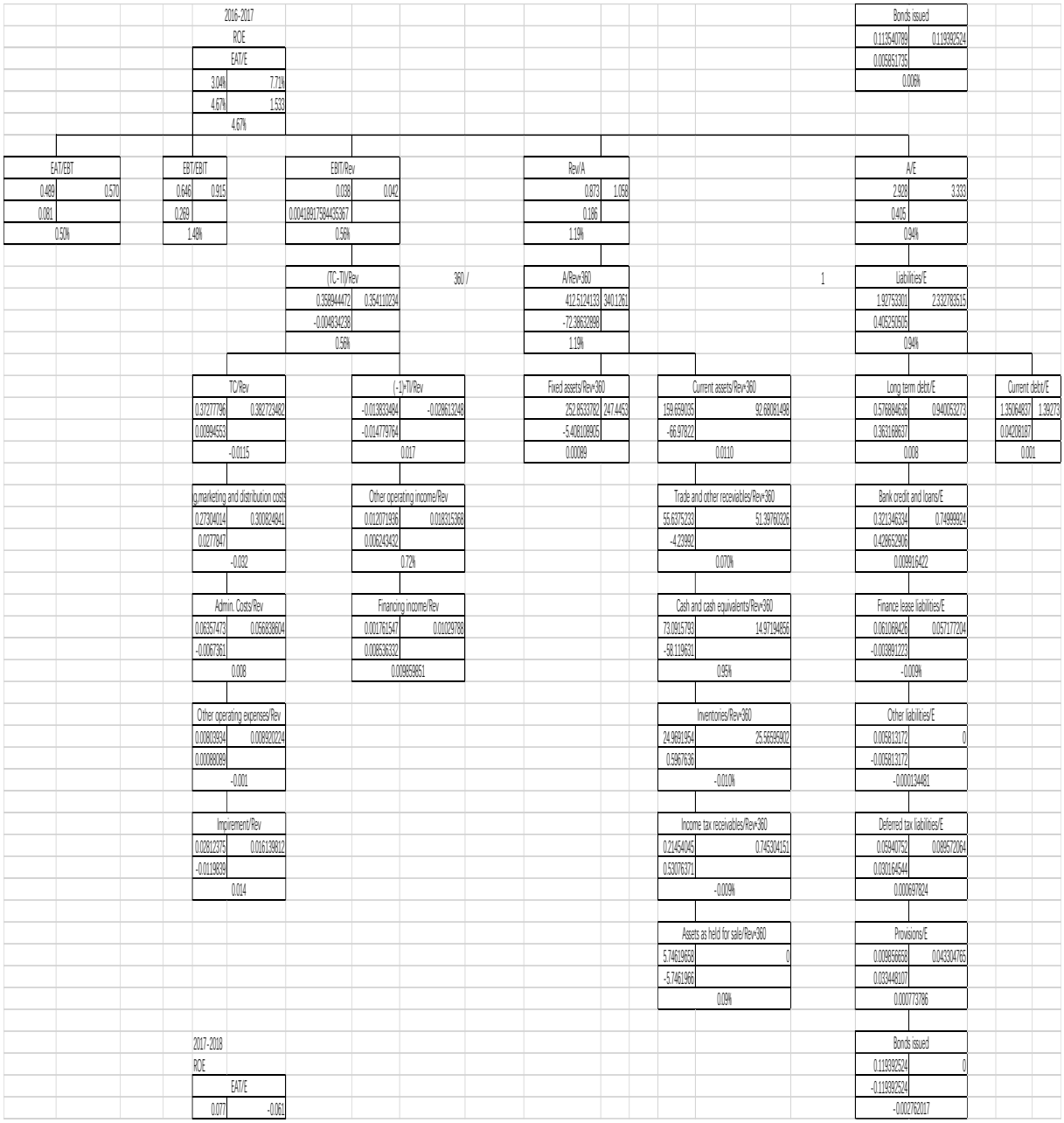
Annex4: Pyramidal decomposition of Profitability during period 2014-2015



Annex5: Pyramidal decomposition of Profitability during period 2015-2016



Annex6: Pyramidal decomposition of Profitability during period 2016-2017



Annex7: Pyramidal decomposition of Profitability during period 2017-2018